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THE UNIVERSITY OF ALBERTA

DRAMA: A FORCE TO DISTANTIATE

by -



ELAINE VERONICA CLARK

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
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EDMONTON, ALBERTA

SPRING, 1979

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Drama: A Force to Distantiate submitted by Elaine Veronica Clark in partial fulfilment of the requirements for the degree of Master of Education.

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P. A. Payne
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Date *Feb. 20, 1978*
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ABSTRACT

Drama: A Force to Distantiate

The writer has found a force to distantiate in the work of Vygotsky, particularly in the statement:

A word is a microcosm of human consciousness. (1962:153)

This study is a microcosm of teacher professionalism.

An attempt is made to capture the facets of a learning event and crystallize them in a prism for the observation and identification of the molecules present in a concept-formation process.

The learning event chosen is a role-taking drama event proposed by Dorothy Heathcote. In searching for a curriculum model in which to set this event, the following selections were considered as levels in the process.

The HOW of strategies: Plans of action for the stages of involvement.

The WHY of teacher action: The theories which motivate and direct choices.

The PERSON of the teacher: Who chooses the context and moment.

The WHAT of culture: The material which is encompassed by the plan.

The WHO of the experiment: The learner, who refracts the energy and transforms his level of knowing into a spectrum of consciousness from which he selects those things which are meaningful to him.

From the cauldron of this curriculum model, learning emerged as a many-faceted formation.

In this study the facets are represented by the octagonal shape of a plan of action. The eight stage shape of the plan takes on form in the prism of classroom action where the sounds of children embody the plan with words. This is a living process and encompasses that area of concept-formation which Schmidt¹ refers to as developing between "reacting to" and "knowing about."

The word SPECTRUM refracts the prism into progressive levels of concept-formation involvement:

- Sensory input: The first step and root of the experience.
- Participation: Increased awareness which is ensured if the learner is consciously attending.
- Expansion: The force of emotion or the will to act.
- Change: The cultural leap producing a change which will be a step in ontogenetic development.
- Transformation: Reorganization where the learner transforms the new into his own behavioural stream of development.
- Relatedness: Openness to the world. The new material becomes objectified and the learner feels free to speak and play in the new environment.
- Understanding: Revealed through reactions of others and the reflected observations of one's own behaviour. The learner comes closer to knowing himself.
- Memorize: A memory engram records experience for future enquiry and retrieval.

This SPECTRUM is a force to distantiate.

¹Schmidt discusses cognitive activity in Child Development (p. 108). He expands on Werner and Kaplan's terms "reacting to" and "knowing about."

Implications of the study are for teacher and teacher education. The study concluded that the arrest of attention and the maintenance of conscious attention are preliminary steps to concept-formation. Significant proportions of teaching time should therefore be devoted to these preliminary stages whenever a concept-formation task is demanded of students. Without a willing student one can have every element of learning but no processing agent. The second implication is that the sounds of children indicate that information is being objectified. The third implication is for teacher education that teachers may learn to create a matrix and attend the process of learning with the powerful means to facilitate change.

The writer found the words of Schmidt, Schachtel, Penfield, Montessori, Merleau-Ponti, Rousseau, join with Vygotsky to sing the phenomenon of education. Heathcote's theme persists:

Take emotion out . . .
and only the burden remains.

ACKNOWLEDGEMENTS

Acknowledgement is here given to W. H. O. Schmidt who first revealed to me the deep structure present in the learning process. Acknowledgement is here given to P. A. McFetridge whose light created this spectrum and led this student in search of a light of her own.

TABLE OF CONTENTS

CHAPTER	PAGE
I. PREFACE	1
THE MOMENTARY ARREST OF THE CONSCIOUS ATTENTION IS A FORCE OF NATURE THAT CREATES FORM	3
Intent	4
Framework	5
A Specification	9
Premise	10
Limitations	10
II. PROLOGUE	11
CURRICULUM AND INSTRUCTION: A MANY- FACETED PROCESS	12
Intent	12
Framework of Intent	13
Elaboration within a Strict Framework of Intent	14
III. STRATEGY	17
THE TEACHER'S STRATEGY: THE SURFACE STRUCTURE	17
Drama: A Spectrum of Attitudes	17
A Definition	17
A Focus	19
Premise	19
The Strategy	20
Plan	20
Stage	25

CHAPTER	PAGE
Tempt	29
Role-Take	34
Agreement to Pretend	38
Tension	42
Emotion	47
Guide	52
Yarn	57
Synopsis	62
Concluding Remarks	63
IV. ELEMENTS	65
THE ELEMENTS OF LEARNING	66
A Proposal	66
The Elements	67
The Deep Structure	68
Plan	69
Evoke	71
Lure	73
Encounter	75
Mediate	77
Elaborate	79
Nurture	81
Transcend	83
Synchronise	85
Synopsis	87

CHAPTER	PAGE
V. LEARNING	88
LEARNING IS A PROCESS	90
The Process Component	90
Strategy is intervention	92
Structure is controlled direction	98
The secret of learning is 'conscious attention'	99
Man is a social animal	102
Synopsis	104
Two Streams of Mental Development	105
The process involves two streams of mental development	108
Learning	110
VI. TEACHING	117
TEACHING: A SPECTRUM OF ROLES	118
Teacher as a Source of Light	118
A light analogy	121
Thoughts	123
Teacher as the Knowledge	124
What is Teaching?	129
Teacher in the Process	132
Teacher-Education Implications	137
Learning—what happens?	138
Concluding Remarks	142
VII. SPECTRUM	143
THE HUMAN ACT OF PROCESSING	144

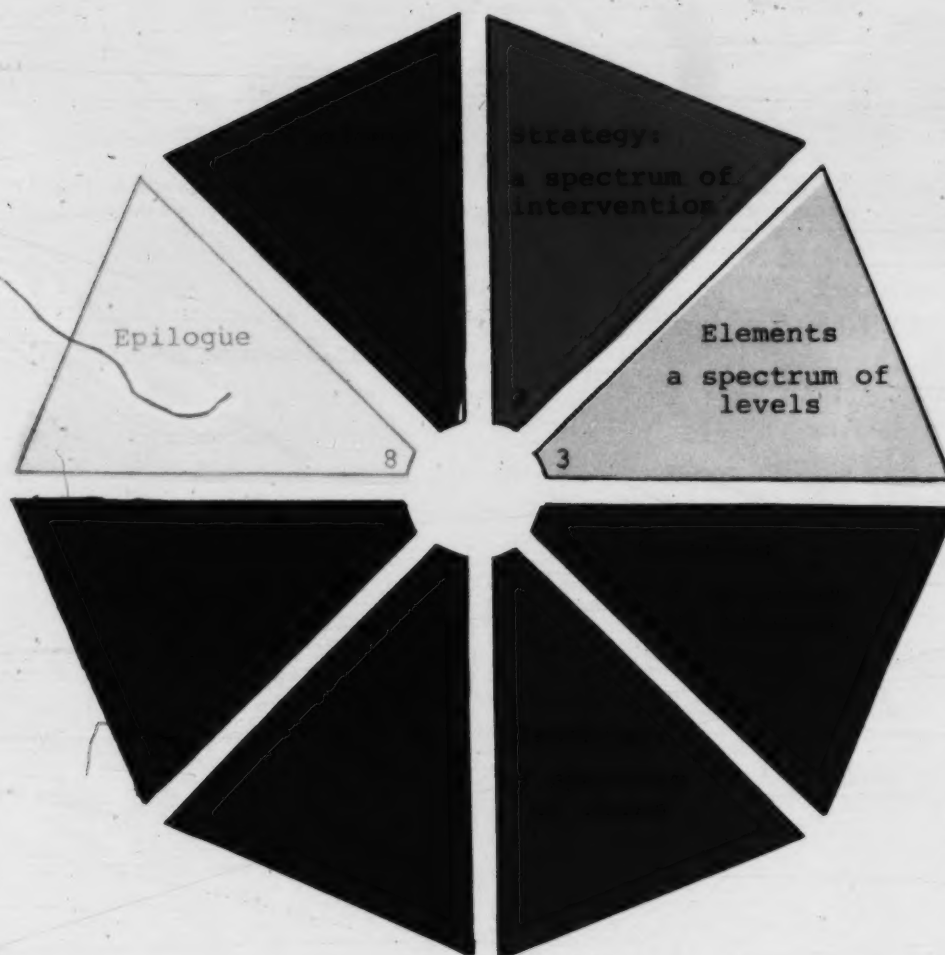
CHAPTER	PAGE
Spectrum	144
The Spectrum Analogy	145
VIII. CHILDREN	147
THE CLASSROOM ARENA OF CURRICULUM	148
The Living Structure	148
The Child, a Human Organism	153
An Illustration	154
IX. ÉPILOGUE	162
BIBLIOGRAPHY	164

LIST OF TABLES

TABLE	PAGE
I. An Illustration of Figure 9: Vygotsky's Three Main Stages Assigned to the Child's Cultural Development	94

LIST OF FIGURES

FIGURE		PAGE
1.	Levels of Curriculum Instruction	6
2.	A Curriculum View: Components in the Classroom Arena of Teaching	7
3.	Definition of the Curriculum View	8
4.	Design of the Study	16
5.	The Context of the Plan 'STRATEGY'	23
6.	STRATEGY: The WHAT of the Learning Experience	24
7.	ELEMENTS: The Form or Body of the Plan	70
8.	Planned Intervention: A Three Step Component within the Teacher	91
9.	Vygotsky's Three Main Forms of Cultural Development	93
10.	The Curriculum in Action	101
11.	An Integration of Cultural-Development Considerations	114
12.	Learning	115
13.	The Teaching Process: Is Planned Intervention	119
14.	A Continuum of Distantiation	133
15.	An Interpretation of Miller's Four Archetypal Education Positions	149



THE STUDY COMPONENTS

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"Interaction of Forces"
by
Glenna Roper Studio, Edmonton, 1978

THE MOMENTARY ARREST OF THE CONSCIOUS ATTENTION
IS A FORCE OF NATURE THAT CREATES FORM

In analysing the components in an act of cognition the researcher has come closer to an understanding of the element of 'conscious attention' and the vital part this element plays in learning.

The evasiveness of this quality of attention is captured by Danz, when he says:

Nature cannot be measured.
Her ceaseless creating,
the flowing, melting, or
bursting of force into form.
(1952, p. 182)

The 'conscious attention' is also a force of nature that creates form. It is one of the elements of learning but one of the most vital as it constitutes the first level of consciousness in an act of cognition and remains the root of any progressive levels of that first act.¹

This preface introduces the study with a photograph which captures a moment of dynamic interaction of natural forces.² The moment captured here speaks with the sensory input which precedes the expression and thus comes closer to revealing to a reader the element so vital to the learning process around which this work has evolved. The

¹Schmidt provides this insight (1973, p. 108).

²Glenna Roper of Roper Studio, Edmonton, captured this moment in an Albertan landscape.

photograph provides us with a moment of arrested attention; a force of the elements of nature which creates a new form; a structure for those natural elements which makes the creation possible, and finally the wonder of the spectrum which under the powerful influence of light reveals the deep and hidden structures present in a simple component. Water, an invisible surface structure, reveals the hidden structure of the prism when forced into the beams of light from the flow of a cataract.

In the following pages, the components of a learning process will be analysed; the moment of arrested attention will be elaborated (p. 72); the force of the components into form will be discussed in "Teacher in the Process" (p. 132).¹ Throughout the work there will be a theme which emphasises the deep structure present in the learner which is revealed under certain conditions and when certain elements are forced into a dynamic unity of purpose resulting in form.

Intent

The study originated in a search for the place of dramatic involvement in learning. Such activity has remained peripheral to the academic pursuits in a school program; fun, but not central to learning and therefore

¹Further references to the dynamic unity in the process of learning are found on p. 144, "Internal Formation."

not relegated to importance in a child's intellectual day.

The search for support found many new and old educational theories 'singing' the value of such intellectual involvement, and assigning undeniable learning value to the characteristics that exist in the spontaneous role-play opportunities present in teacher-directed, organismic matrix environment of a dramatic event.

Framework

The shape of the study was influenced by a curriculum model which explores components as they interact at different levels in a classroom arena of curriculum (Figures 1, 2 and 3).

The HOW component represents the role of action which in this case is a Strategy, based on D. Heathcote's 'in-role' method of involvement in a drama event.

The WHY component explores learning elements which provide a theoretical base for the 'Strategy.' This component is also discussed in the 'Process' section as the human development knowledge that prompts a teacher's actions.

The WAY explores the teacher's role in a variety of influences and suggests teacher responsibilities and teacher-education needs that are implied by the study's findings.

The WHAT is the cultural material or subject matter which a teacher selects for the cultural encounter.

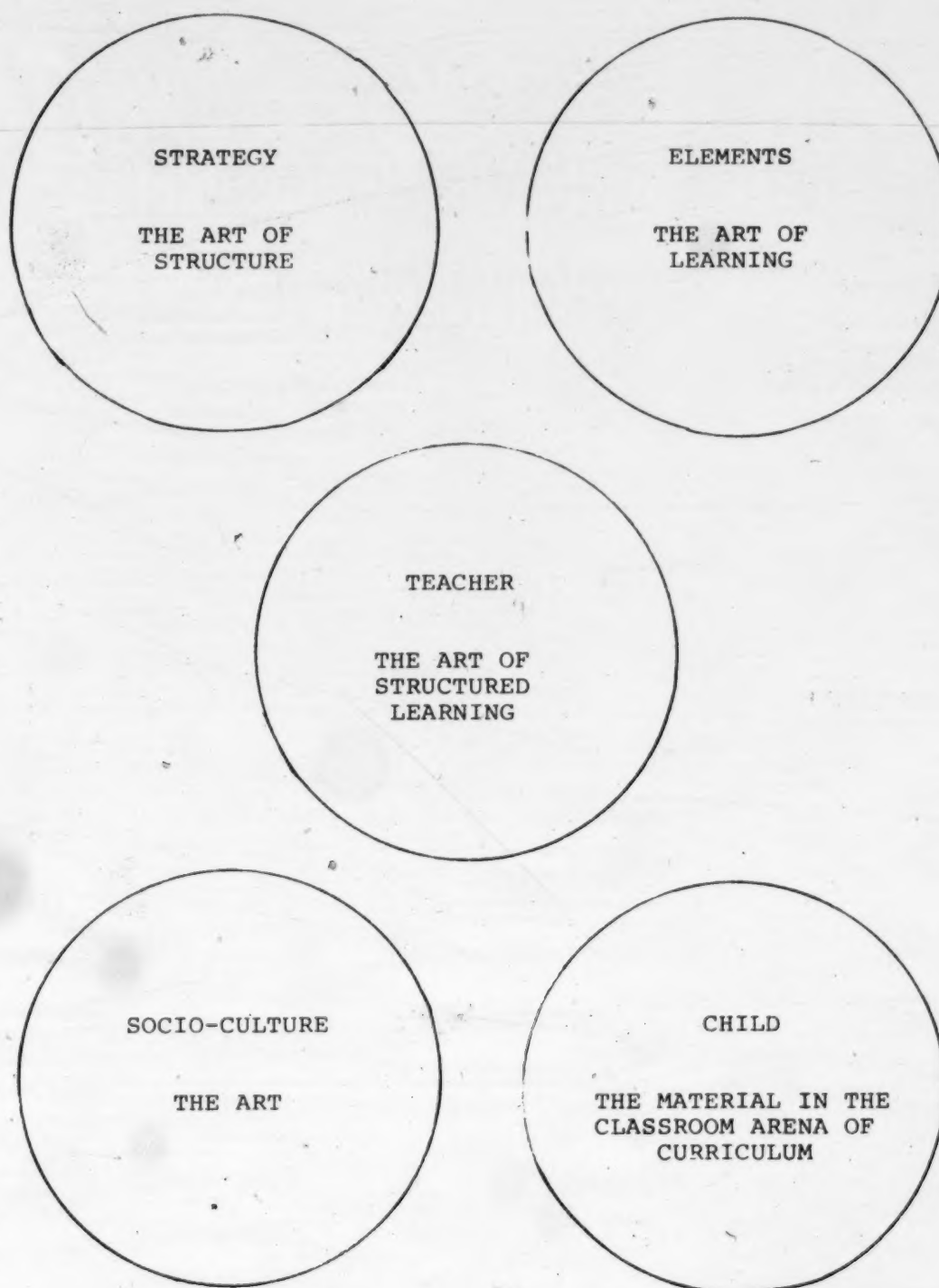


FIGURE 1. LEVELS OF CLASSROOM INSTRUCTION

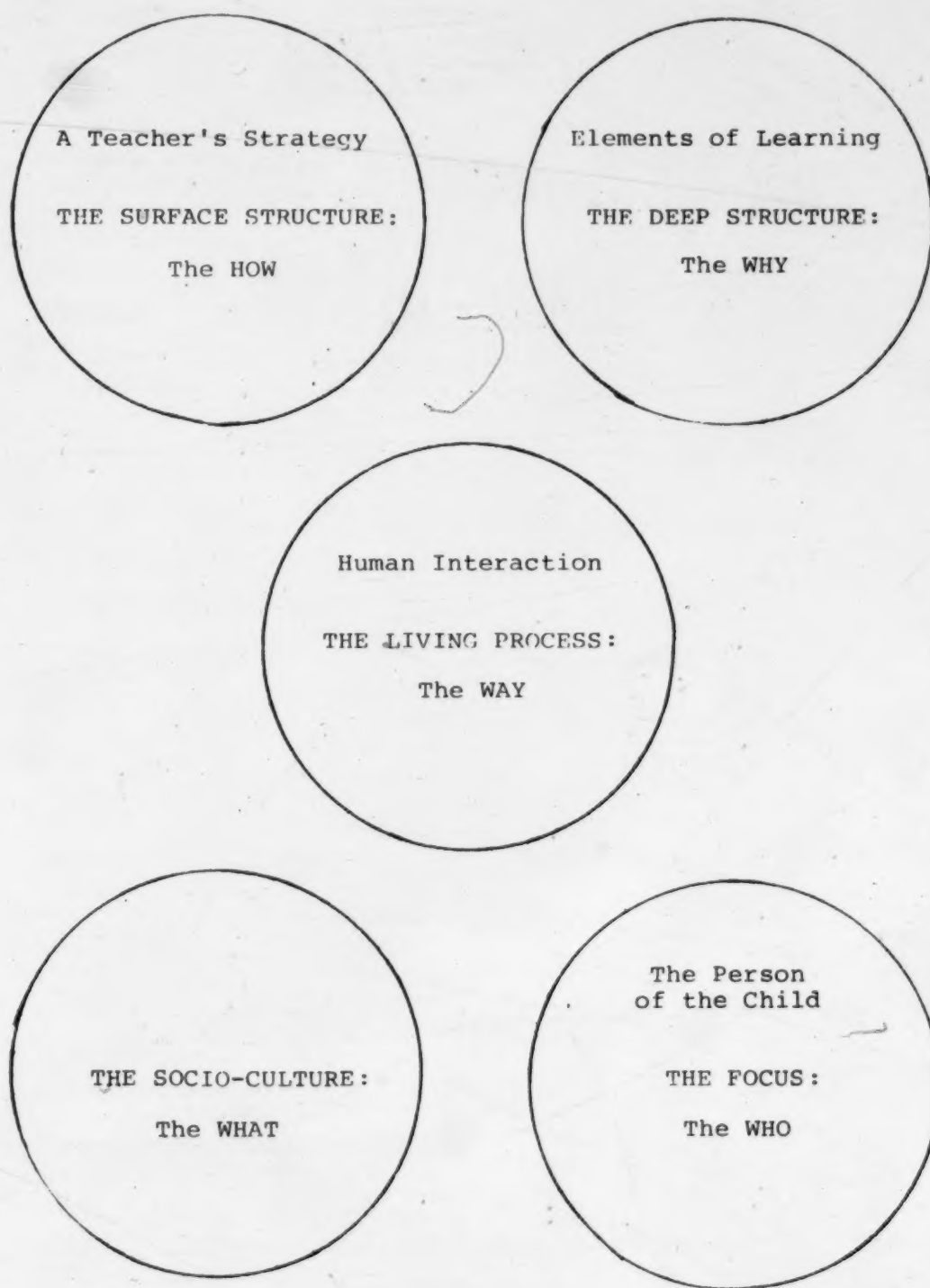


FIGURE 2. A CURRICULUM VIEW: Components in the Classroom Arena of Teaching

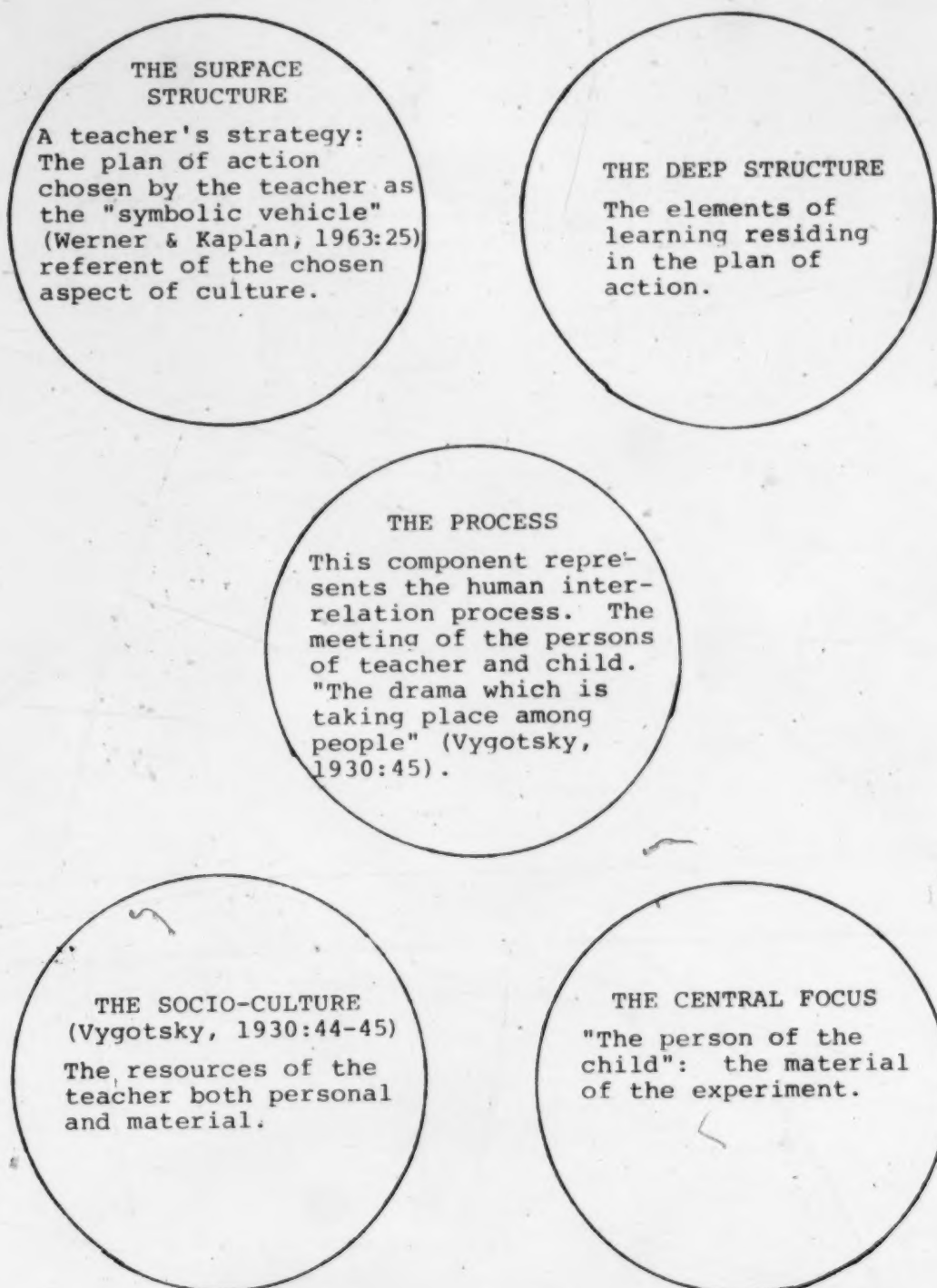


FIGURE 3. DEFINITION OF THE CURRICULUM VIEW

It is represented by a view of the three stage process of cultural development and the teacher's part in the socio-cultural process of development.

Finally the WHO is the component which represents the child: the reciprocal quality and the focus of the model. This component is represented in the study by a view of the different perspectives on childhood and the author's own place in the matrix.

The whole model is brought to the view of the classroom in an example of the organismic matrix or the classroom arena of the curriculum in action.

An analogy brings another dimension to the work. It serves to explore the depth of implications made and helps illustrate the complexity of a teacher's role in concept development. This spectrum theme helps to unite the work. The analogy is given a focus on pages 14-15.

A Specification

This study is considering an act of cognition in concept-building. It is not a general view of the total learning process but this first act of cognition: the first levels of consciousness in concept-formation.

The pattern which may be established and continue to evolve from this first level of consciousness will be one concept among countless others but this study is considering the act of establishing one concept and a teacher's role in that action.

Premise

This work is based on the scientifically established fact that neuronal recall pattern is only laid down during periods of conscious attention (Penfield, 1975:66).

Limitations

The ~~complex~~ process of learning is an organic one and cannot be truly captured in descriptions, models or illustrations.

The "real relations among people" (Vygotsky, 1966: 41) cannot be completely conveyed in a method of reporting.

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CURRICULUM AND INSTRUCTION: A MANY-FACETED PROCESS

Intent

Much school activity for children is a shell-like experience, the bare bones of a structure picked clean of nourishment by the adults who gain the rewarding segments by doing the talking, moving and decision making.

Another shell-like experience of equal value is where the child does the talking, moving and decision making in a void where 'any way' is forward.

The depth of the experience resides in a process. The key to the process is an involvement of the child with the adult in a common situation where the child's decision-making involvement builds cognitive structures in increased levels of consciousness so that in reflection the child may rebuild and restructure this experience to more advanced levels of his development. This process is the consciousness of the teacher meeting the consciousness of the student; an interaction which is the outcome of a teacher's strategy and deliberate intervention.

The shell of a classroom environment must contain the deep structure, a seed of intellect, a germ of an idea, so that the classroom becomes an "organismic matrix" (Werner & Kaplan, 1959:25): a place where the child finds nourishment and space for his personal development within the "will to communicate" (Merleau-Ponti, 1973:101).

Framework of Intent

In linguistic structures the deep structure (tree) or abstract, can be represented by more than one surface structure (the spoken words) in a phenomenon called "syntactic paraphrase." So in learning, the basic aim or deep structure can be realized and interpreted to the students in many concrete shapes through strategies. We could call this: STRATEGIC PARAPHRASE.

The surface structure chosen can be matched to the context and learning environment desired. The only constant element is the deep structure which must be clearly established and support the chosen surface structure. To illustrate this framework in terms of teacher responsibility the following questions are included:

What aspect of cultural development am I pursuing?

How will I present this to the children?

These questions relate to the surface structure.

Why am I presenting this information at this time?

Why have I chosen this method to present this aspect?

Where do I hope to direct this cultural development?

(i.e. Where am I going?)

These questions relate to the deep structure.

Student-teacher involvement should not proceed without teacher-consciousness of the two levels of influence.

It is an elaboration of the old maxim: What am I doing? and

Why am I doing it? The 'what' implies the cultural development responsibility of lesson plans; subject areas; teaching resource materials: The Surface Structure. The 'why' implies the hidden stream of biological or historical development; the social or human strand of the process teachers engage in: The Deep Structure. Aware of the two streams or not, a teacher will affect both.

This 'Framework of Intent' is itself built on the deep structure of commitment to the belief that there is never a 'teacher-proof' curriculum. Teacher movement; intonation; choice of word; level of personal development; view of childhood; will all influence the surface structure of classroom activity whether it is teacher-planned or bought. Student-teacher involvement assumed in the framework of this study is bound in teacher awareness of the two streams of development and the two levels of the complex process leading to concept-building or higher mental functions. The teacher aware of both streams of development and operating on the two planes of structure is truly engaged in the development of the person of the child.

Elaboration within a Strict
Framework of Intent
(Heathcote, 1971:53)

Heathcote's words are in relation to theatre. The elaboration procedure she refers to is improvisation, but the process is applicable to any situation where one person wishes to convey an idea, has an "intent." The intent

needs a framework in which to elaborate: to express the emotion and bring the facts to focus. The elaboration procedure is also the procedure of the classroom and is the procedure that this writer will use in an attempt to engage the reader; bring the intent of this study to his focus; lure him on to consider the issues illuminated by the reader's emotion; and bring our two views into an action which creates form; forces distantiation and a new perspective for us both: The prism of surface structure separating the white light of human consciousness into a spectrum of colour.

Figure 4 is a synopsis of the development of this study: a drama intent, in a framework of strategies elaborated by the teacher and students during a learning process.

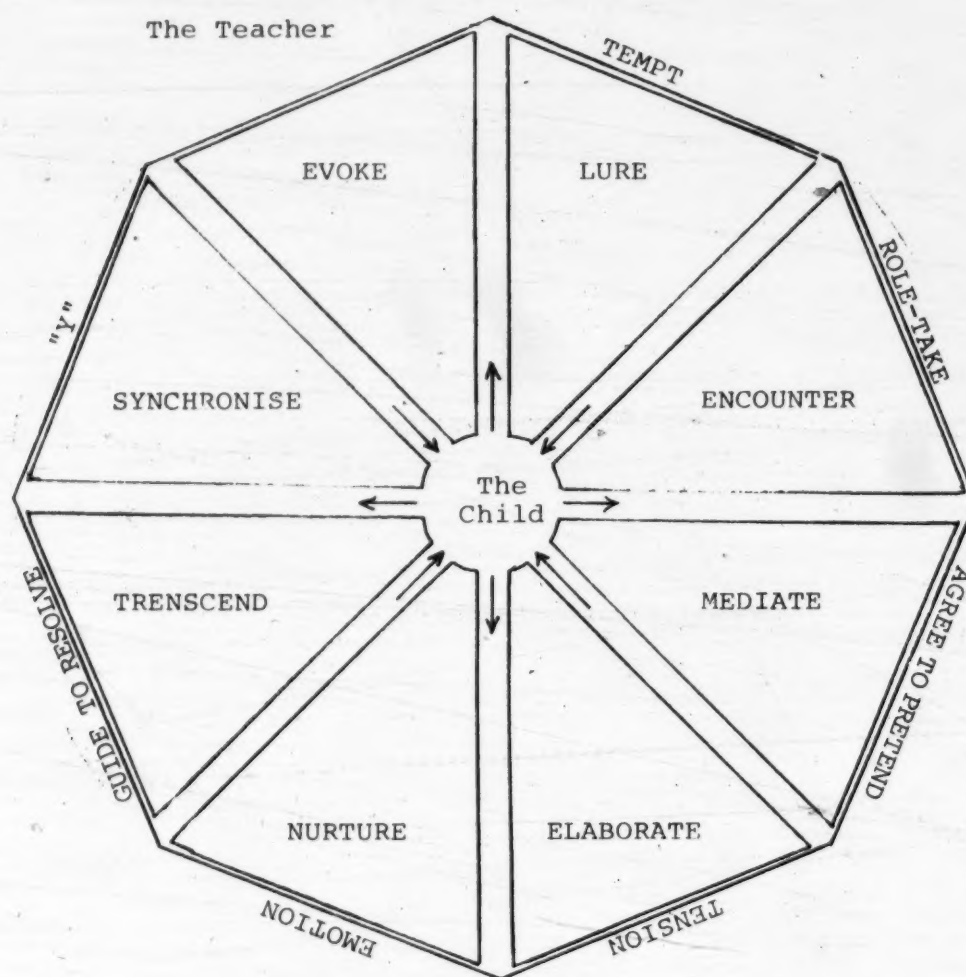


FIGURE 4. DESIGN OF THE STUDY.
 ELABORATION WITHIN A STRICT FRAMEWORK OF INTENT:
 The bone structure of a plan encompassing the deep structure of a learning experience. The process is realized in human interaction. The teacher is peripheral to the whole event. The reciprocity of initiated and interpreted exchange of ideas is represented in the spokes reaching toward the central focus: the child. The figure is set in a potential matrix for socio-cultural development.

The eight-step plan is a surface structure. The deep structure resides in the potential of the plan to awaken the "many faceted response" of the student in a common situation with others. The process is formed by the force of human interaction.

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THE TEACHER'S STRATEGY: THE SURFACE STRUCTURE

The surface structure (see Figures 2 and 3) for learning through drama is discussed here. Procedures used by Heathcote are used to develop the strategies for teaching.

Drama: A Spectrum of Attitudes

We perceive behaviours not persons. We interpret not receive direct stimuli. We perceive actions upon things not things. Awareness is of things 'meaningful.'

An 'organismic matrix' denotes a dynamic event. Only those who have shared the common experience have interpreted its action and behaviour and have a frame of reference for these interpretations. The common experience will always be a bond for the participants.

A Definition

The use of drama in this study is strictly in the Aristotelian terms of 'action.' The earliest use of drama was to act out an event as an expression of ritual. This study adheres to the use of drama as an involvement. The term could be synonymous with 'will in action.' The following interpretation then has no relation to 'watching' but to 'doing.' Reflective watching may result from this 'doing.'

A. Focus

There is, at one period in the drama, a dynamic feeling of unity. At this moment there is a propulsion to act. Merleau Pont¹ uses the expression "the driving force of language," when he defines "will to communicate." It is toward this moment of inner force where action presents speech and deed presents words that this interpretation of a Heathcote inspired drama is planned and this study is directed.

The driving force of language
is the will to communicate. (Merleau-Ponti)

The will to communicate is a force to distantiate and the following classroom practise is one way to capture that will.

Premise

Rousseau contrived an environment for the ideal education of Emile. Montessori called her teachers "directors" of the learning structured by her materials.

Today's proponent of a structured learning environment in which the children shape their own learning is Dorothy Heathcote whose method of teaching is here interpreted from articles, films and video under the title of STRATEGY. All the quotations in this component are the words of Heathcote.

¹Merleau-Ponti's reference is contained in the conclusive statements of Consciousness and the Acquisition of Language, 1973, pp. 101-102.

The Strategy

Plan. There is some difficulty in discussing an activity and therefore this study will describe a classroom event to give the words of Heathcote and the teaching strategy being considered—a frame of reference. The event will provide a basis for the understanding of the structure implicit in Heathcote's writing and demonstrations. We will therefore follow the key word STRATEGY as we proceed through the description of the event to give the principles of Heathcote a structure. Those principles will be extended using the developing action as an example and the reactions of a teacher in the process. Each step will therefore include an aim; a Heathcote principle; a description of action; a teacher's reflection.

The environmental situation and the environmental preparation for the example to be used are as follows.

Students: Grade eight drama class of thirty two.

Relationship: Students do not work in cohesion but vie with each other for attention and look to the few extroverts as the 'star' performers. Classes are struggles for power.

Strategy: Teacher and a grade seven class set the stage for a Heathcote inspired drama.

Chosen Event: The unrest in Pompeii under the imperial rule of Rome.

Chosen Time: 79 A.D.

Chosen Vocabulary: Toga, Caesar, Pompeian, Baths, Cladiatorial shows, Amphi-theatre, Forum, Centurians.

To capture attention force a unity and focus on the group, the room is structured to the needs of the chosen event. A large open space is provided for the body of the drama and a focus of attention is constructed with tables and chairs draped with colored cloth and illuminated in the corner of the room, opposite the chosen entrance. All other entrances to the room are locked. To further channel the initial attention and prepare the group for the element of surprise a corridor is constructed from the concertina-folds of a large packing box and a sign is hung on the entrance door:

YOU ARE NOW ENTERING
THE CITY OF POMPEII
IT IS 79 A.D.

To further enhance the element of surprise and discovery a student of the grade eight class is taken into the teacher's confidence and agrees to 'play the king.' Another student agrees to take the role of a leading citizen in Pompeii. The teacher plays the role of a Roman Centurian who is sent on a mission to Pompeii, a colony of Rome which is not serving the Emperor as it should. The Pompeian citizen drapes a cloth around her and assumes an antagonistic pose to the teacher who stands accusingly. These three members form a team and have several meetings

where vocabulary, intervention and assumptions are decided upon. The team shape the environment.

The scene is not lit except for a spot-light which illuminates the throne of Caesar, shining across the challenging figures of the Roman and Pompeian.

The context in which the illustrative event occurred can best be described in a diagram (Figure 5). The plan for explicating Heathcote's method and linking it to the event is shaped in Figure 6. Each element of the strategy will be developed through an aim, a principle, a description of the action and an observation.

THE CONTEXT

Corridor Entrance which is:

- i) Gateway to Pompeii
- ii) Entrance to Caesar's presence

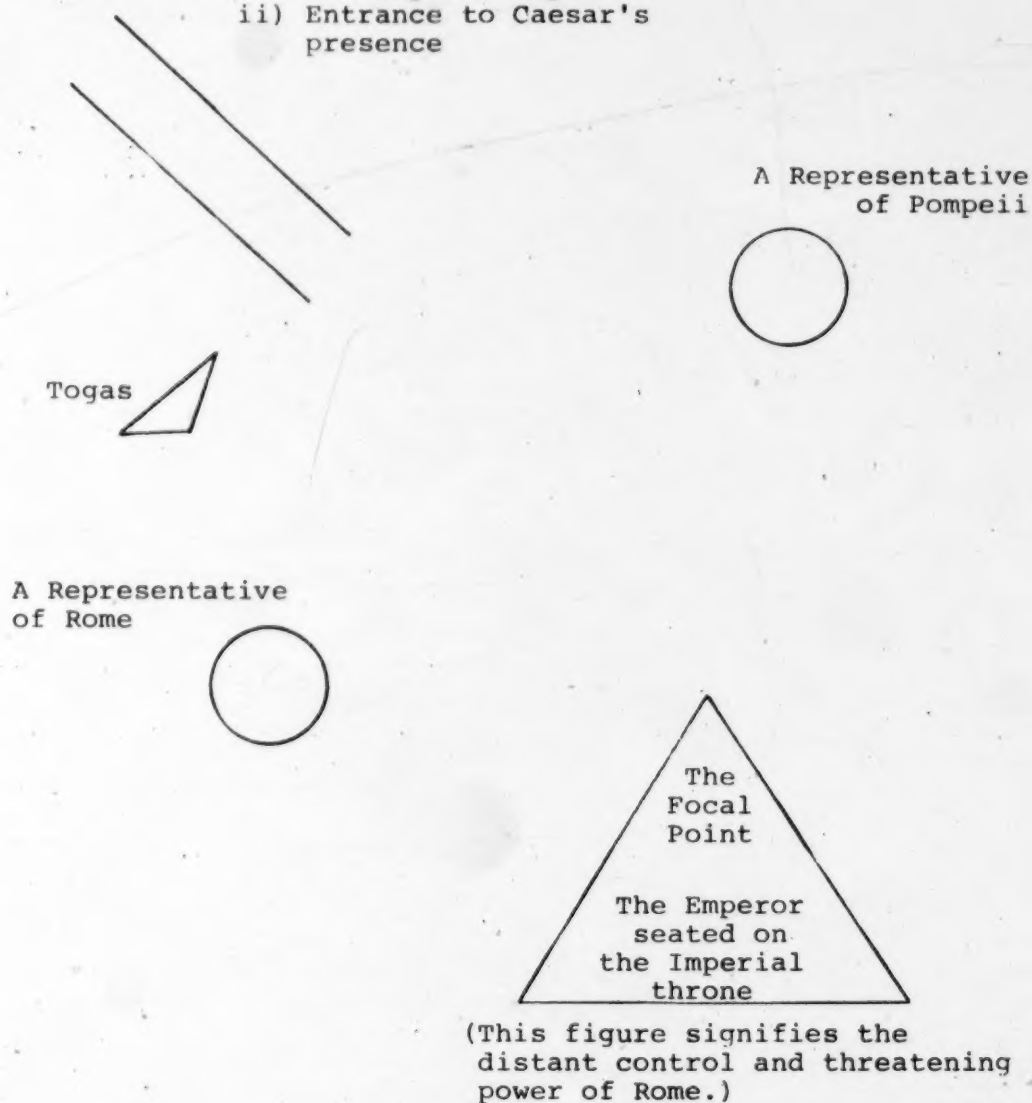


FIGURE 5. The Context of the Plan 'STRATEGY'

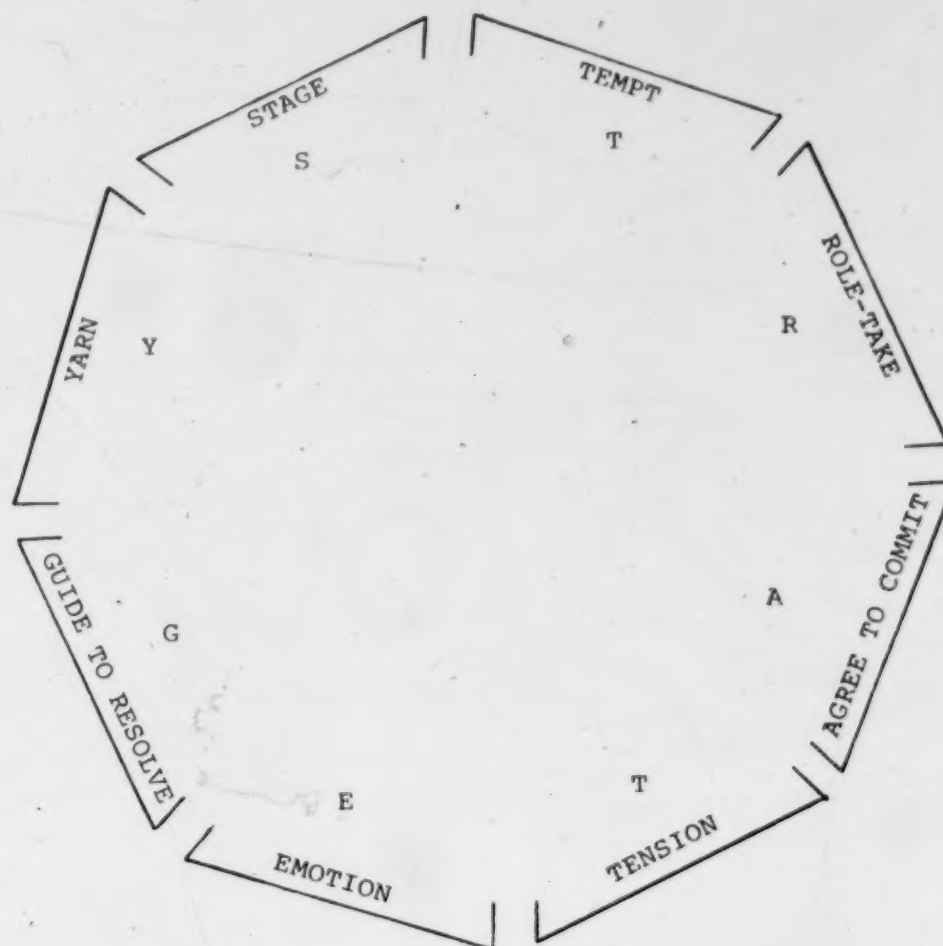
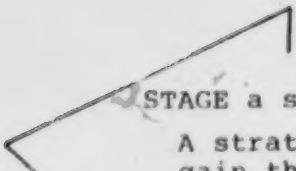


FIGURE 6. STRATEGY. The WHAT of the Learning Experience.

The organic shape of the plan. The bone structure strategies. This shape is unique to the plan in action described in this study, as each plan will take the unique shape of the class around which it was envisioned.

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STAGE a surprise:

A strategy to
gain the attention
of the children.

A HEATHCOTE PRINCIPLE

The element of surprise
is one of the most
important bases of work
in educational drama.
(1971:42)

Elaboration of the Principle

The key to Heathcote's surprise and discovery is in the structured environment and so the element of staging is an essential feature of the method. Her aim is to gain the attention of the children so as to focus on the chosen topic and by unifying the force of the group establish a working relationship upon which the project is launched.

We have here already isolated many characteristics of the method: surprise; discovery; structure; environment; attention; unified force. They are all related in this initial step.

The initial environment is thus structured and the element of surprise and discovery is embodied in this prepared scene (Figure 5) which meets the students as they straggle into class, chewing gum, tossing their books aside and expecting to create a period of unco-operative antagonistic disparity.

Description

The children enter the structure and apart from a few comments: "sick," "what's the matter with her?" there is an immediate silence akin to awe which lends atmosphere to the prepared environment and prepares the way for a unified force and a launching of the event.

Out of this focus can emerge that moment which launches (the) work.
(1971:54)

The strategy of staging the event is the most powerful, and requires the most consideration when a teacher plans a Heathcote drama.

Observation

The special silence which accompanies the "momentary arrest of attention" is the teacher's assurance that this initial step is successful.

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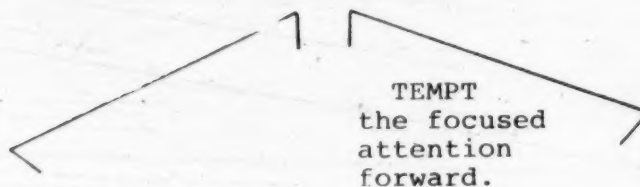
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A HEATHCOTE PRINCIPLE

The teacher projects his energy firstly to focus attention, then to direct it toward the defined area of intent. (1971:54)

Elaboration of the Principle

The second step in this interpretation is the invitation leading toward response. An initial element of surprise has focused attention and unified this focus. Now what is the teacher's aim in gaining such interest? There is at the teacher's disposal a potentially powerful force and it is at this time that the teacher projects her energy to direct the attention "toward the defined area of intent" (1971:54).

As previously discussed, the teacher has chosen the event or incident and with the aid of a team the vocabulary and environment are prepared. The students have entered the environment and taken on the desired aspect of attention. The teacher must now be prepared to reveal to the class the demand that is to be made on them and some clue to its character.

Description

The citizen of Pompeii who has silently challenged the Roman continues to hold this pose and the silence is maintained for a short period. One rather laconic student drags out a chair and proceeds to slouch into it and view the performance. Further action is needed to pursue a strategy that will involve the class. The teacher in the role of centurion commands the seated student:

"There are no chairs in the city of Pompeii."

Very quickly this challenge is met by the Pompeian citizen

who has held a pose for so long:

"Romans have no right to speak to Pompeians in that manner."

In this fashion through the retorts of the Pompeian to the challenges of the Roman, the class is brought closer to the chosen event; the language specific to the time and the place; the attitudes surrounding the decisions and prompting the behaviour. The students follow the dialogue. They are interested in the dual situation of the teacher in role and are trying to establish the meaning of this confrontation. The usual procedure of chairs being dragged out and possessions strewn around has been brought to a halt and the students are a step closer to a unified involvement.

Observation

Heathcote advises that a teacher "define the area and create the active situation with which he may cope" (1971:54). It is in these first two steps of focus and direction of attention that the elements of risk are defined and calculated by the teacher.

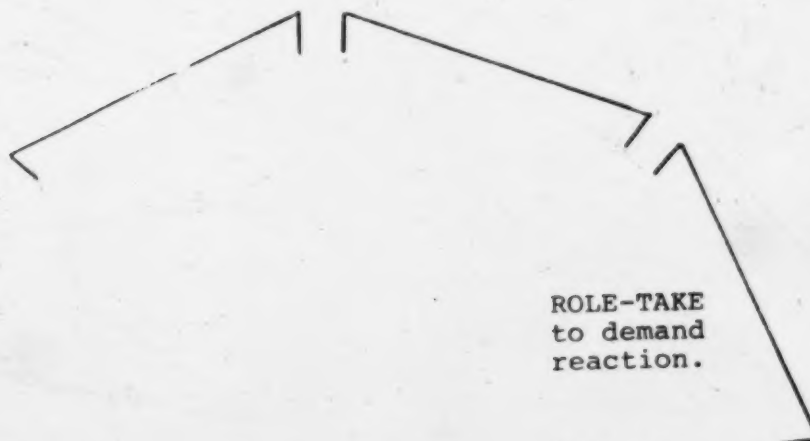
For the students there is a characteristic element of "group inertia" (1971:54), where all focus is on the teacher to bring a problem situation to solution. It is to dispel this phenomenon and instigate action and awareness that these first two steps have required care in planning.

We are moving toward using the attitudes of the

whole class to solve the problem, or in Heathcote's terms we are inviting a "spectrum" (1971:54) of attitudes to overcome the inertia of the group situation and provide an opportunity for the expression of ideas and a safe framework within which to confront them.

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A HEATHCOTE PRINCIPLE

I often work in role at first because it fixes emotional reaction . . . (1975:95)

Elaboration of the Principle

We are now entering the reaction stage of this communication process. In the example being given the teacher has chosen to meet the class in the role of a Roman centurion. It is because of this "strongly fixed role" (1975:94) that an immediate emotional response is demanded of the students. Other strategies could be used to produce the desired reaction. The "fixing devices" as Heathcote calls them, are tools at the disposal of the teacher and only limited by his courage and imagination.

The elements of place, period and persons have been built around the chosen incident by the commitment and role-play of the team and now the movement is made toward the role-taking demand upon the students.

Description

The teacher makes a direct demand upon the students as a centurion order. A student is chosen as commander and ordered with some authority of tone to don his toga and gather his Roman contingent to meet the Pompeians. As this process of selection and dressing takes place (limited by the number of togas provided), the teacher steps toward those still without role and addresses the Pompeian citizen once more:

"Gather your citizens and prepare your petition for Caesar."

This direction is again issued with authority and an

authenticity of tone which presents the strategy of role-taking to be one of duty rather than choice. It is a strategy which over-rides embarrassment, inhibition and the inertia which could characterise the group situation. When the formerly inactive group look toward the Pompeian citizen for leadership the Roman centurion marches from the room assuming he is followed by the newly formed contingent. Behind the retreating group of soldiers an agitated group of Pompeian citizens are beginning to yell complaints and injustices against Rome and the leader's voice is heard to say:

"Citizens of Pompeon . . ."

Observation

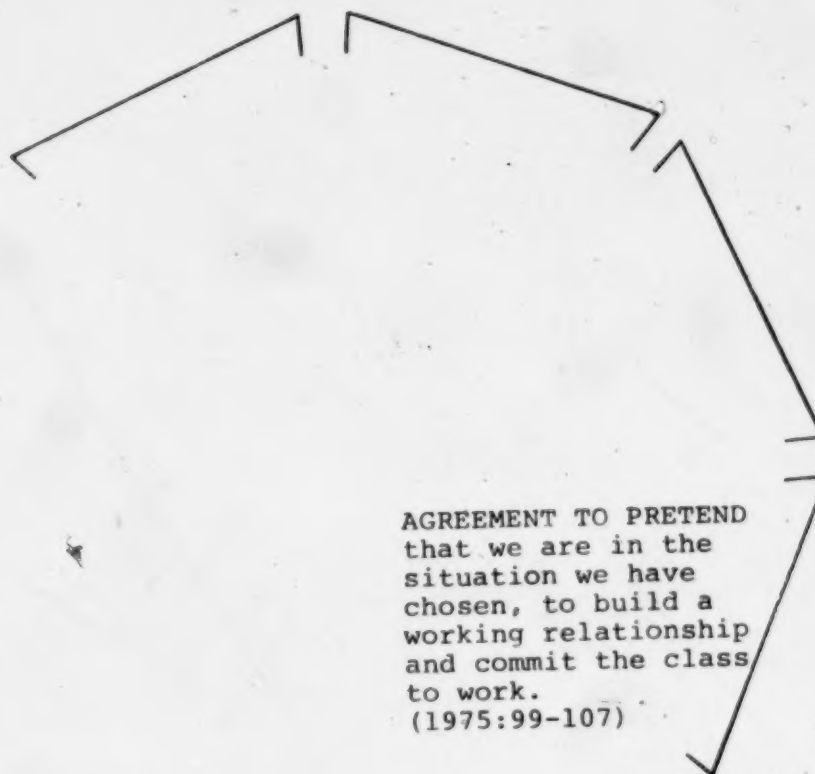
The initial student attitude of apathy and question is now replaced with "a kind of involvement" (1975:103). The teacher is gradually relinquishing leadership and establishing trust and an expectation of co-operation between herself and the class. This relationship is being established because the teacher "in role" is "filling the spaces between people with meaningful relationships" (1975:95). Emotional reaction evoked by the "fixing device" is a ". . . state from which one can escape only by working through the situation."

To summarise we note Heathcote's instructions:

- "1. We . . . isolate an area of concern.
2. We involve groups of people . . ." (1975:97)

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A GREEMENT TO PRETEND
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A HEATHCOTE PRINCIPLE

We ask of the children . . .
that they shall take up
attitudes and viewpoints
and for the time believe
in them. (1971:57)

Extension of Principles

The steps taken to this point have been deliberate and slow. A structure has been provided; roles established; and action instigated. The teacher is moving toward involvement and commitment. The moment when the teacher can expect full commitment must be gauged by observation of student reaction and level of involvement. To do this a teacher needs to be observer as well as role-taker. Previous steps were planned so as the director of the work could ensure attention and observe the stages of involvement, recognising the moment when commitment is taken. Heathcote says:

"I work slowly in the beginning. I do not move forward until the class is committed to the work" (1975:107).

How does she commit the class to the work?

"I use many strategies" she says.

Description

The Romans leave the atmosphere of the dim room and find themselves in the floodlit hall. As their eyes meet there is an immediate risk of losing commitment and a further need for intervention. The teacher does not step out of role or change expression but with the same authority of tone warns the contingent that weapons will only be necessary if the Pompeians will not agree to a discussion. They brandish their weapons and approach the entrance to

the room. Inside there is a loud meeting taking place: an unexpected event. The door is locked and the Pompeians refuse the Romans entrance to the city.

Observation

Challenges are not only for students in this strategy game. The teacher is one of the group and must yield to a certain amount of the offer but has always an observation level of awareness and shapes the situation to accommodate the aims clearly decided upon before the event was introduced. There is an element of risk involved for the teacher and Heathcote observes that drama is not fully exploited in schools. One syndrome she feels influences this avoidance of the potential of drama is:

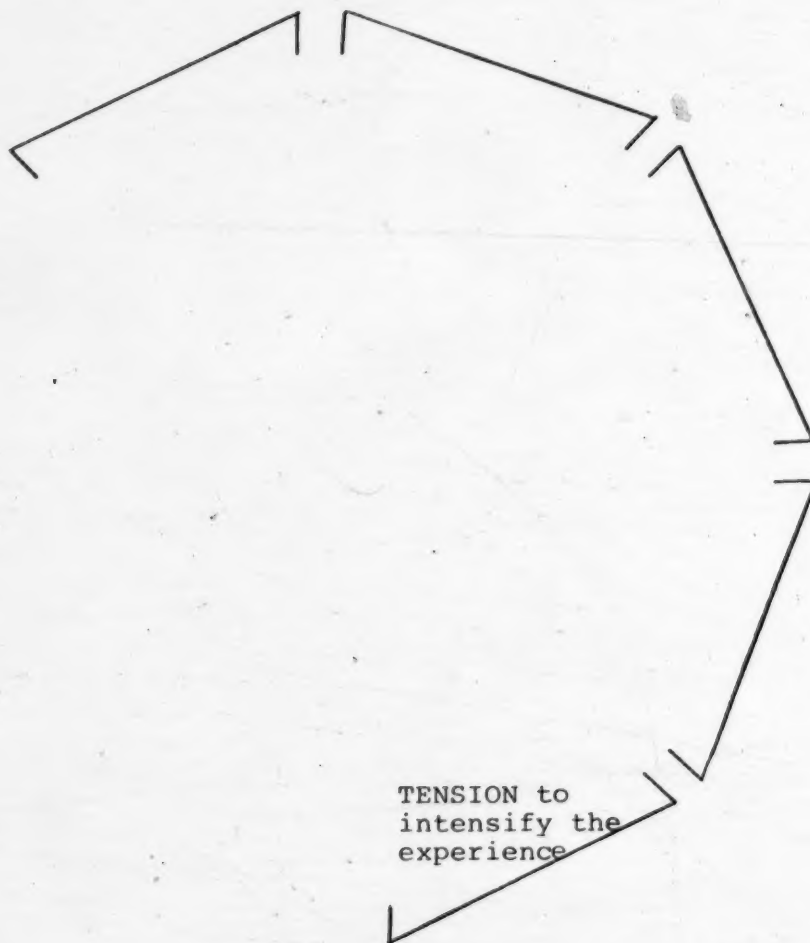
"let's not have too many children surprising the teacher" (1975:105).

In the drama being described the strategies have helped build a working relationship so as when the invitation to involvement is made the students find it a credible enough situation to 'suspend disbelief,' yield to the offer made to role-take and commit themselves to that role.

This commitment is tested and expanded in these steps of role-taking and agreement to pretence.

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A HEATHCOTE PRINCIPLE

Tension of some kind must
be present in the drama.
(1975:100)

Elaboration of the Principle

Heathcote says, "... strategies are of two kinds: those that stimulate the class to working and those that further the action in the drama" (1975:99). The strategies we are now concerned with are those that "further the action in the drama." The situation must be worked through to a satisfactory conclusion. Heathcote calls this stage of the drama the "state of being trapped" (95). The class and teacher now work "more as a team" (99) and pace is increasing as commitment to work is achieved.

Heathcote explains tension as: "leaving something to chance" (1975:100). In the drama we are considering the chance factor is the outcome of the Pompeian discussion: Will they submit or not? There is an element of tension in the action of the teacher leaving the room. The action is a calculated risk. It is calculated in that the moment is carefully timed to ensure that the class is sufficiently committed and directed to handle the action without a teacher's leadership. It is a risk in that the class have not been known to work responsibly without the teacher's leadership. Caesar remains a distant figure of authority. This symbol of power signifies the final tension of a Pompeian meeting with the Emperor himself. The tension of not knowing what will happen next forces the action forward. Tension is a powerful quality.

Description

As the Romans stand in the hall, locked out of Pompeii the teacher attempts to cope with this unexpected element of tension. A loud conversation is held between the leaders on either side of the door. The Pompeians are reminded that Rome has sacked and destroyed many cities that did not yield to its authority and a strong suggestion is made that the people would be wise to gather in the forum for a meeting with the Romans. More thunderous sounds are heard as objections and suggestions are tossed together in mob decision-making.

Finally the door opens and the Romans are brought to the forum where the Pompeians wait, jostling and restless, some waving petition papers.

Observation

Not more than fifteen to twenty minutes have elapsed from the time the grade eight class arrived. The strategies of surprise, of calculated risk, role-taking and tension have brought each child's reaction toward an involvement of some sort. Even in the few moments that have passed since the Romans left the room there has been an intensity of commitment.

The angry scene which meets the Romans is full of emotion. Inertia and group dependence has given way to expression. The children are experiencing a play. This

is what Heathcote means when she recommends that the inner demands of the play are made on the class. The class feel and express the tension: the inner demands of a crisis.

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"Emotion is the
heart of the drama
experience. Talking
about emotion is no
substitute for
feeling it." (1975:107)

EMOTION TO FEEL
AND EXPRESS

A HEATHCOTE PRINCIPLE

If we take the emotion
out of drama there is
only the burden left.
(1975:102)

Elaboration of the Principle

Committed classes are driven by the emotion that this commitment creates. There is difficulty in the uncertainty of this element yet without it the structure is surface only and the involvement is about "ends."

Heathcote advises that:

True drama for discovery is not about ends; it is about journeys and not knowing how the journeys may end. (1975:103)

Journeys are made with real commitment. Real commitment means emotion and the expression of that emotion. It cannot be done quietly. Could the drama we are considering have continued with emotion and commitment if the teacher had intervened and told the children to shout quietly?

Although great care can be taken to prepare the structure and the strategies that will commit and help the action forward, there is no complete control over the emotion that will take hold of the event and express itself in a diversity of unpredictable ways. This the teacher must expect, accept and have the courage to allow. It is the time when the child who has ventured to role-take and commit his person to the decisions that that role will demand steps beyond his own identity and knows the tension and perplexity of another. The expression that accompanies this process will appear as dissonant and will provide the "miscellany of ideas" which the following action of the

drama will bring to order.

Consonance is only outstanding as a form when it brings order to dissonance.

Description

Difficulty is experienced in the forum as the centurion answers the jeers of the citizens.

Citizens: "We want freedom in our city."
"Taxes are too high."

Centurion: "The Emperor has already closed your arenas because of your defiance. You will have to compromise."

Shouts and jeers from the crowd.

Centurion: "Send six of your citizens to represent you
(shouts) in Rome."

Romans leave the room again and once more the voices roar. Out tumble the citizens and an appeal is made to the leader:

Centurion: "Send only six to give your petition to the Emperor."

Out in the hall there is no noise, no pretence. The Romans wait to escort the colonials to their Emperor. They order themselves into a ceremonial shape. A chariot whisks off to prepare the way. Finding the door locked, the charioteer returns to the centurion: "The keys . . . (pause) Madam." (Madam did have the key this time.) The way is made clear. Pompeians march with the Romans and a ceremonial entrance is made through the same classroom doorway which is now the gateway to Rome. Inside is a

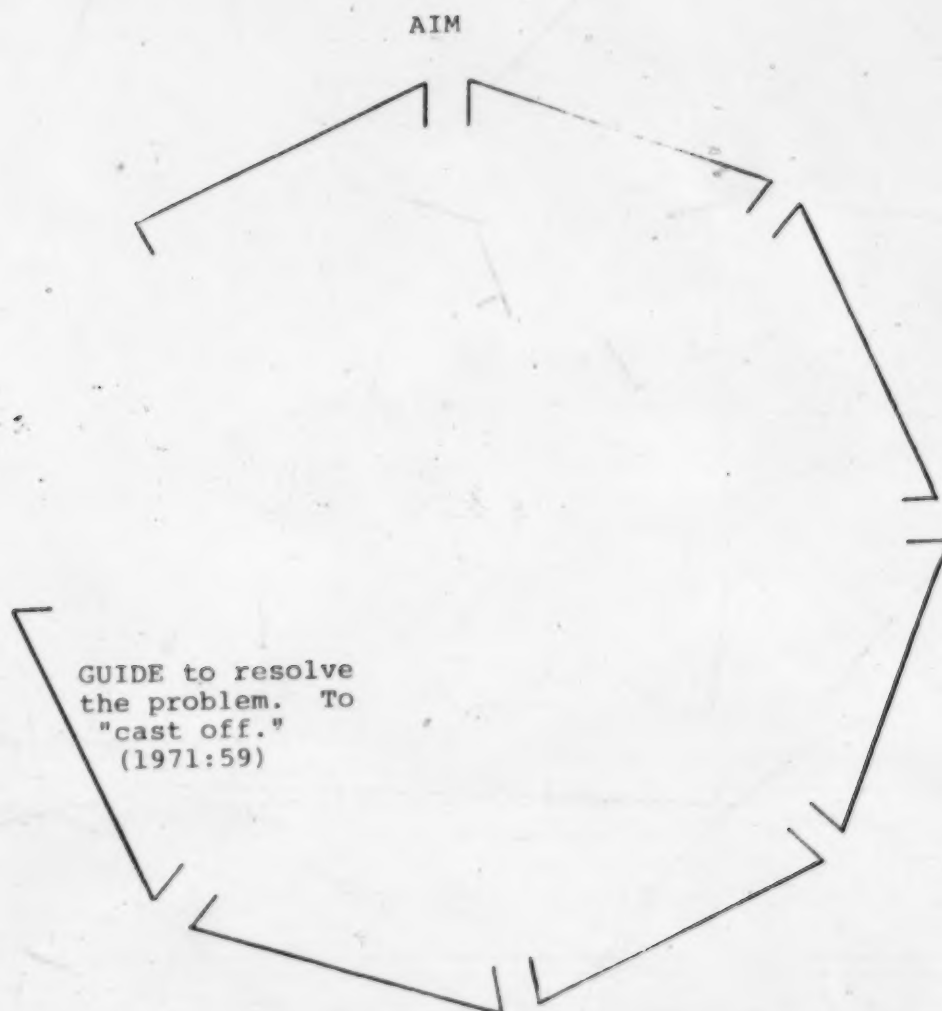
moving scene. There is complete silence. Caesar has turned to greet the audience. The other citizens of Pompeii have moved back into the shadows. They are still figures in the play; watching yet not audience.

Observation

Emotion and its expression is the apex of the event. It is the visible sign that the other steps have succeeded and that something significant is happening. There is now a depth to the structure. The event can be called a learning experience. Let the sound prove the value of the experience. It is truly rewarding, though we remember the words of Heathcote:

It is not always comfortable for the teacher for the expression of the class sometimes threatens her. (1975:96)

STRATEGY
GUIDE
Y



A HEATHCOTE PRINCIPLE

Go forward to a believable
outcome. (1975:104)

The total end possible at
this present time. (1971:59)

Elaboration of the Principle

As necessary as the strategy that invited the children to the initial reaction and commitment is the one that brings the miscellany to order and guides a satisfactory conclusion. One strategy invites the pretence and the other guides the return to reality.

Heathcote's definition of drama:

Taking a moment in time it uses the experiences of the participants, forcing them to confront their own actions and decisions and to go forward to a believable outcome in which they can gain satisfaction. (1975:104)

In the example we are observing the children have been brought forward but a strategy is to be employed to guide a conclusion.

Heathcote uses the term "casting off" (1971:59) for this stage in the drama. The aim now is to distil or capture the experience and bring it back to be reviewed.

To bring about the desired reaction the interference of the teacher is crucial. Heathcote has commented that children will "use their own instinctive aggressive behaviour" (1975:101). Teacher interference can be used and the use of the elements which Heathcote lists as: "darkness and light, stillness and movement, sound and silence" (1975:101-103), are extremely effective. This seventh step incorporates the use of these elements to control the emotional scene we left last stage.

Description

The lights on Caesar draw our attention as we enter the room. The stillness is felt. We are conscious of the silence. Caesar has turned to look at us and we are in the presence of the Imperial person.

Suddenly the Pompeian representatives break out of the ranks and sweep past the soldiers. The silence is broken by shouts and dissatisfied complaints. Petitions wave and notes are thrust up to Caesar. Caesar stands; the guards shout and push; the Pompeians jostle. They pull the Imperial robes.

What will Caesar say? What will he do? Will they pull him down? The guards defend him and shout to gain control. (They are very angry. Caesar is worried. The citizens in the shadows remain still. Are they in the event or watching the event?

The full lights switch on and the brightness of the white light breaks the mood. There is a moment of time when the whole scene is a portrait: still; light; silent.

Observation

We have in the last thirty minutes, lived in another place and another time. We have experienced an "involvement of some kind" (1971:57). We have felt the "inner demands" of a play and attempted to make decisions from the

role of another person. We have been forced to distantiate. Some have felt and expressed the feelings of a conquered city; the terror of mob hysteria; the responsibility of protecting a leader and appeasing a crowd. The teacher has felt the power of the group. She has faced it and compromise was possible. No one was watching. One boy creeps out of the cardboard folds of the corridor entrance:

"I was the keeper of the gate," he said quietly. (He had in the past been the keeper of the missing door handles.)

An Alternative Strategy to Resolve the Drama

Another strategy, planned but not facilitated in this drama is 'SURPRISE' used as a concluding focus.

The year 79 A.D. was the year the volcano Vesuvius erupted and covered the city of Pompeii. A messenger announcing the news of the erupting mountain would have been an extremely powerful strategy.

Interventions of this kind bring a sudden focus to the possibilities that the expression of the players has produced. A perspective is given to the whole event. This intervention would provide a platform from which to view what happened in the final reflective step of the drama.

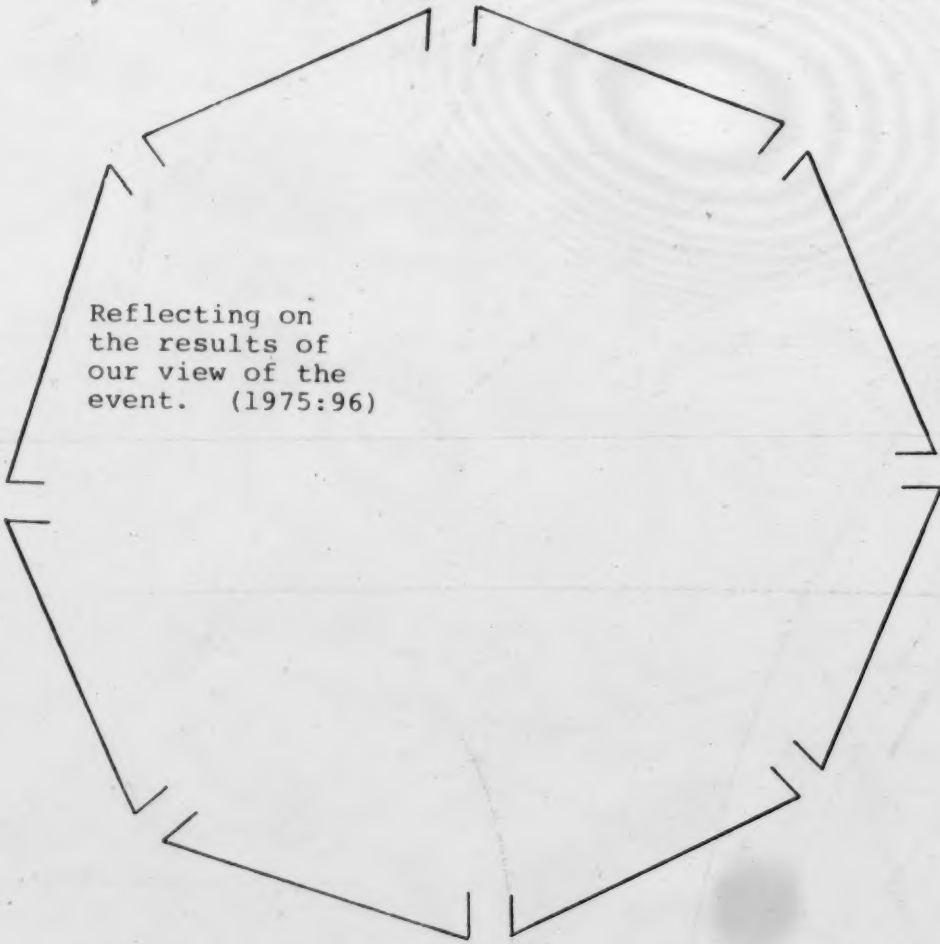
STRATEGY

Y

An unknown variable
quantity.

ARN to spin in future
weaving

AIM



Reflecting on
the results of
our view of the
event. (1975:96)

A HEATHCOTE PRINCIPLE

True drama for discovery is
not about ends; it is about
journeys and not knowing how
the journeys may end.
(1975:103)

Elaboration of the Principle

The last step is always "reflecting on the results of the event" (1975:96). It is the teacher's right to insist on this opportunity to reflect. Heathcote realizes that "good theatre can come out of this process" we have discussed but her first aim is to have "good people come out of it" (1975:96). She therefore states that helping children to "think, talk, relate to each other" in short "to communicate" is what she is engaged in "in the teaching business" (1975:96).

The reviewing of most art forms is only a matter of viewing but in drama 'the person' is the material and the product and Heathcote reminds us that in drama, review is a complex process because it is "a memory of the event" (1975:96).

We have mentioned the words: "confrontation of ideas" (1971:54) throughout this interpretation and now the time has come for that step in the event. We step out of role and confront ourselves. How do we feel about how we acted, made decisions and viewed others in the role of that other self? How did the others make us feel? Are we happy with the results? What would we change? What would be possible solutions to this problem we were engaged in solving?

The teacher also confronts her ideas. How does she feel about her relation with the students? What has she

gained from this involvement? What has she extracted from her observations that will help her direct that student, this group? What strategies may be selected for future journeys?

Description

There is a moment of freeze and then an awkward silence. The teacher's action of removing the toga brings a noisy return to the reality of the classroom.

"We thought you'd gone mad."

"Why didn't you tell us so we could be prepared?"

"That was great. Can we do it again?"

are some of the comments that are audible. Some are negative. The journey was too fast.

We discuss the advantages of being prepared and an equal number believe that the surprise element is advantageous. Discussion quickly leaves the present and returns to Rome and Pompeii.

"Who was the Emperor in 79 A.D.?"

"Why did we call him Caesar?"

"Wasn't there a volcanic eruption in Pompeii?"

"Were you frightened Terry?"

Terry admitted he was worried.

The buzzer goes and the students run to gather their belongings for the next class.

Observation

As this event was built in a drama room, during a drama period by the drama teacher there was no opportunity to pursue the facts we'd experienced. There was an attempt to collect all relevant materials in the library but because there was no purpose, interest in the 79 A.D. history dwindled. This is the fate of many sensory inputs in a separate-subject, separate-teacher organization.

The purpose of the drama in this case was to force a situation where the whole class could co-operate with one focus and where the reticent student would be as involved and as important as the extrovert.

The co-operation and tone of this group of students was transformed from the moment of commitment in this event. Another event of this kind wasn't planned but the future experiences tended to involve the whole class. One drama planned by a group of students was altered to involve the whole class as an Easter surprise on the same pattern of the Pompeian event.

Drama lessons with this group were a joy from this day because everyone was involved and willing to move forward. We didn't come to an end in our journey.

Synopsis

S TAGE SURPRISE to gain the attention of the children.

T EMPT the focused attention forward.

R OLE-TAKE to demand reaction.

A GREE TO COMMIT to build a working
relationship.

T ENSION to intensify the experience.

E MOTION is the heart of it.
Let the sound prove the value
of the experience.

G UIDE TO RESOLVE the problem.

Y ARN TO SPIN IN FUTURE
EXPERIENCE.

Concluding Remarks

'Strategies' are defined in the dictionary as 'devices for instigating.' A 'strategy' is something we employ: The art of planning and directing.

It is of interest to compare the definition of the word 'Tactics.' This word is defined as opposite to that meaning in the 'strategy' definition. A 'tactic' is something used to 'deploy': the art of deploying or maneuvering; a device for gaining an end.

In considering these terms we can come to a closer understanding of the meaning of 'STRATEGY' as used so often by Heathcote and which forms the surface structure of the model formed in this study.

Strategy is the device employed by a teacher to instigate a beginning—never about ends. Strategies will direct journeys that are on-going, never arriving at a pre-determined destination but thrusting forward: one journey instigating another.

The teaching strategy is a deliberately planned structure around which the children build. The finished product is shaped by the organic flow of the persons involved but the framework of the shape was pre-planned and constructed by the teacher who envisioned future development.

The structure we prepare is a lifeless one. We allow the person of the child be the working material which

creates shape just as in any art form, material is the representation of the life expressed.

To conclude this component with Heathcote's words:

. . . Structure the drama lessons rather than plan the children's contribution out of them and so spend precious time trying to keep to the plan. (1971:61)

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THE ELEMENTS OF LEARNING

A Proposal

During a role-taking, decision-making event as proposed by Dorothy Heathcote, children are active participants. There is a deliberate attempt to arrest the attention and an intention by the use of contrived situations to move the participants through levels of consciousness, closer and closer to 'knowing about.'

This educational drama leads and may force involvement and reaction. Schmidt (1973) emphasises that a vital component of any learning situation is 'affect.' No matter what learning style is employed by the student in moving from 'not understanding' to 'understanding' the successful transformation "has its beginnings in organismic 'reacting to' and maintains its roots there" (108).

Merleau-Ponti (1973) further elaborates that the child selects what is meaningful and useful from the environment (51-53). The learner will synchronise this selected perception with his own organismic development, transforming what is known about himself, the world and others to a new level of 'knowing.'

To structure a learning environment that invites, lures and entices the child to new levels of knowing is the task of the teacher.

I am proposing that the teacher has a role to play

that is central to the desirable transformation in a learning situation and that moments of awareness can be dynamically structured in educational drama. What is being considered is the structuring of an event which invites arrested attention; lures the transformation which follows this moment of arrested attention and then; entices the ongoing affects, which is the thrust toward "knowing about." Schmidt would say we are thinking of cognition as occurring on different levels of consciousness, and that each level implies "more processing of the initial sensory input" (108). Vygotsky would say the process, if successful, would facilitate a "qualitative change" in the ontogenetic development of the learner (1966:22).

In the following pages the 'Elements of Learning' will be extracted and considered in an attempt to provide the hidden depth of this first component 'Strategy' (Figure 4).

The Elements

The elements of learning are the key components which give depth to the surface structure and identify an event as a cognitive process. Each level indicates in increase in the level of consciousness: the movement from "reacting to" to "knowing about" (Schmidt, 1973).

Teacher commitment to and knowledge of the elements of learning which exist in the simplest day to day interactions with students, can explore and expose these deep

structure experiences and bring life to the shell like structure of the classroom activity as a prism can separate a ray of white light into seven colors.

The deep structure. The eight step plan in 'Strategy' is a surface structure. The surface structure shape represents progressive steps in the shaping of an event.

The deep structure resides in the potential of the plan to awaken the 'many-faceted' response of the student in a common situation with others. Each step of the surface structure is an interaction of pupil-teacher involvement and from its shape the deep structure is formed. The process of formation is then the force of human interaction.

The form or the deep structure represents increased levels of consciousness in the cognitive process. Each new level implies more processing of the first level: the initial sensory input.¹

A spectrum suggests arrangement by degree and so the increased levels of processing in this concept formation are represented by the colours separated by the refracting surfaces of a prism in a beam of light. The analogy of the spectrum will be elaborated in the 'Process' section.

¹This is suggested by Schmidt, 1973:108.

This study searches for the elements of learning in an attempt to identify depth, body, cognitive structures hidden in the surface activity of a strategically planned classroom experience.

Plan. With elements of learning directing the actions of the teacher, strategies become agents of a cognitive process. This section will attempt to identify an element of learning for each step of 'Strategy.' The elements are identified and defined through reference to the works of Schmidt, Penfield, Merleau-Ponti, Hodgeson and Schactel.

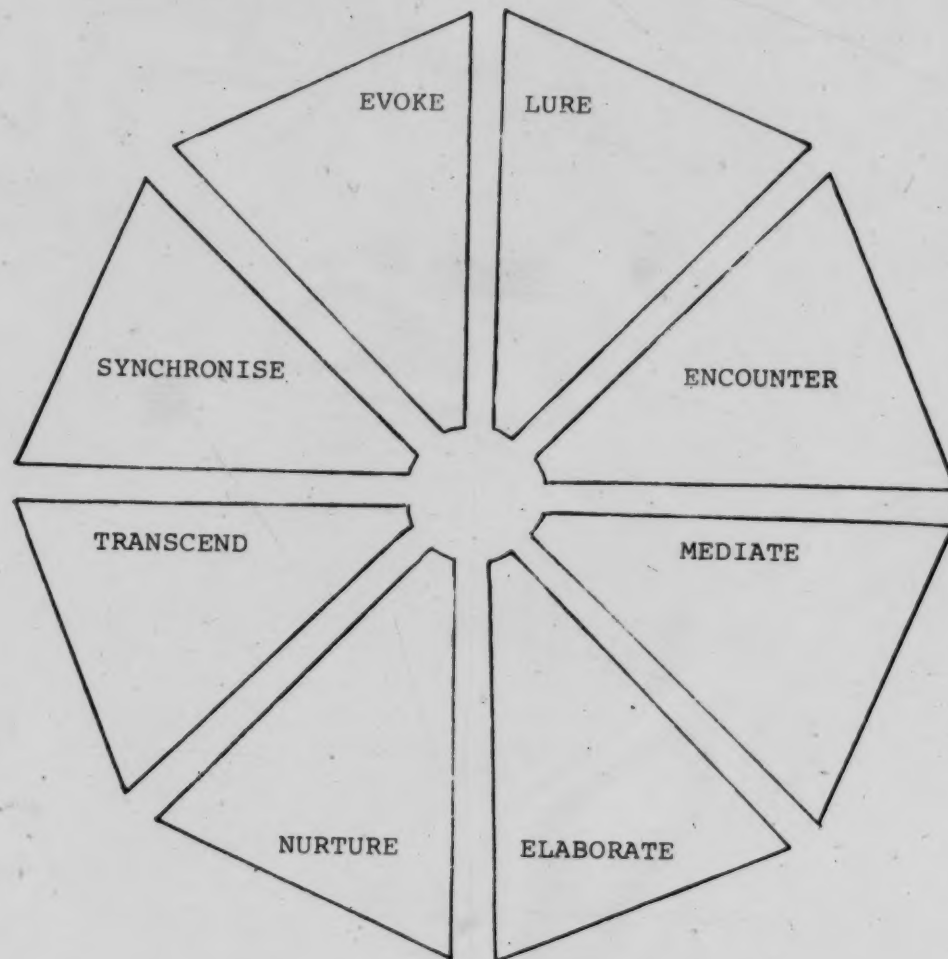


FIGURE 7. ELEMENTS: The Form or Body of the Plan
(The WHAT and the WHY of the learning
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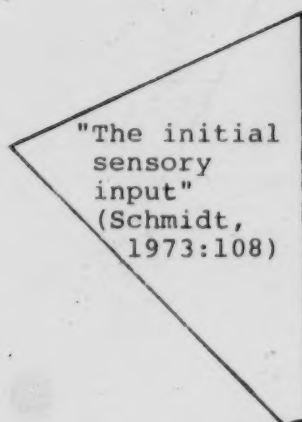
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EVOKE A MOMENTARY ARREST OF ATTENTION



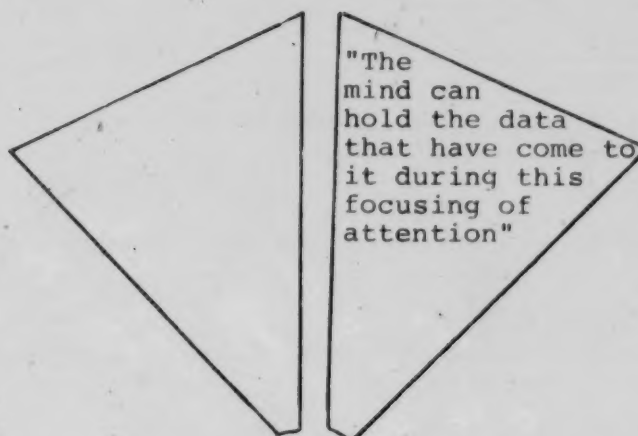
ELEMENT OF LEARNING

"Cognition starts with what at first may be only momentary arrests of attention by way of sensory inputs that signal possible significance to the organism." (Schmidt, 1973:109)

"The transcendental silence of the realm of conceptual thought." (Merleau-Ponti, 1973:xxiii)

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LURE THE CONSCIOUS ATTENTION

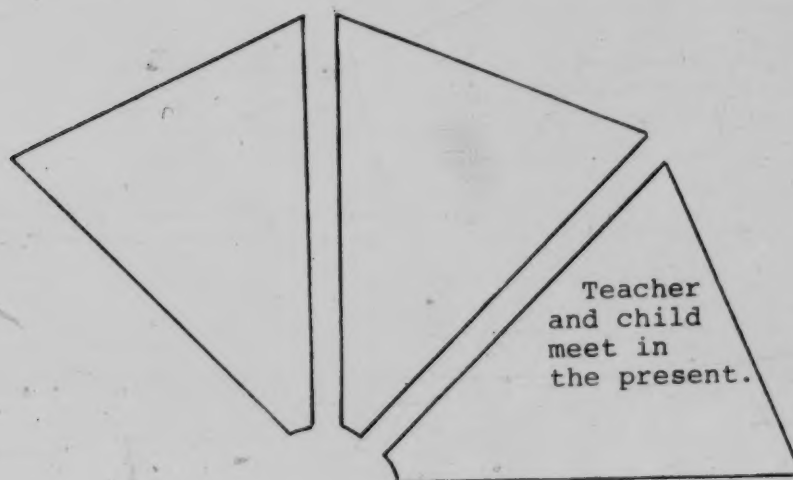


ELEMENT OF LEARNING

"The mind can hold the data that have come to it during this focusing of attention and while the mechanism for the stream of consciousness is moving forward." (Penfield, 1975:71)

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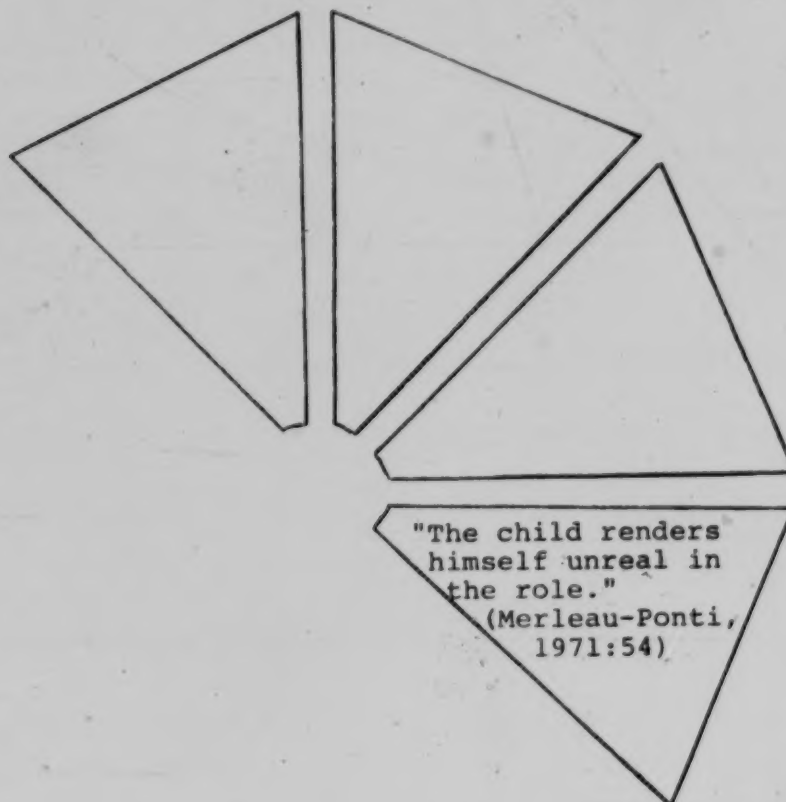
ELEMENT OF LEARNING

"The self and others are conscious of one another in a common situation." (Merleau-Ponti, 1973:49)

"We need an art capable of recreating life, accurately observed from the standpoint of the present, and not from the standpoint of color and shape like painting, or sound like music, but from the standpoint of co-existence of sensations." (Hodgeson, 1971:23)

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MEDIATE THE CULTURE



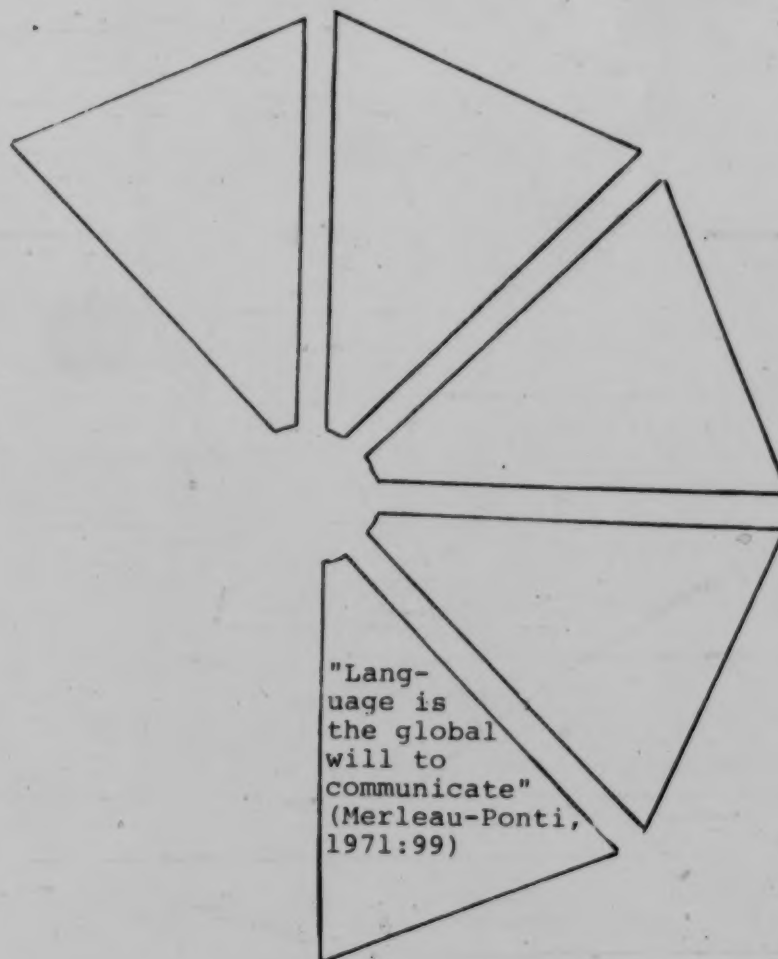
ELEMENT OF LEARNING

"The self and others are conscious of one another in a common situation." (Merleau-Ponti, 1971:49)

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LABORATE

ELABORATE TO GAIN OBJECTIFICATION



ELEMENT OF LEARNING

"Intentions are only known once they are realized.

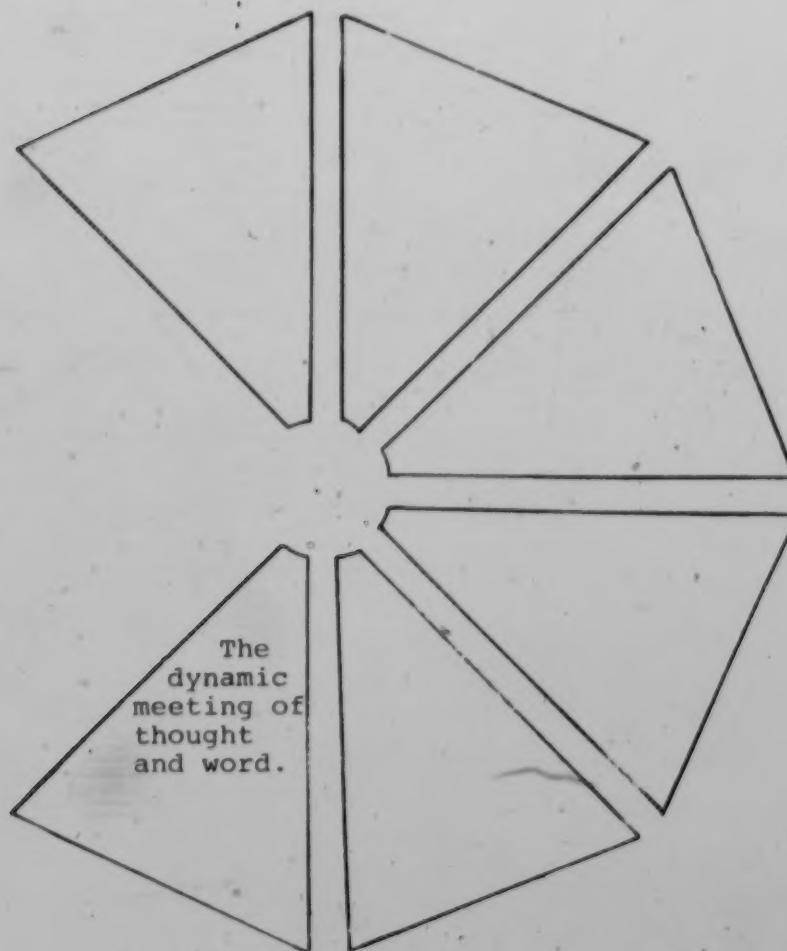
Consciousness of self comes through expression."

(Merleau-Ponti, 1971:69)

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URTURE

NURTURE TO THE MOMENT OF
DYNAMIC MEETING



ELEMENT OF LEARNING

"At a certain moment the whole set of indications which draw toward an undetermined goal, call up in the child a concentration and a reassimilation of meaning." (Merleau-Ponti, 1971:29)

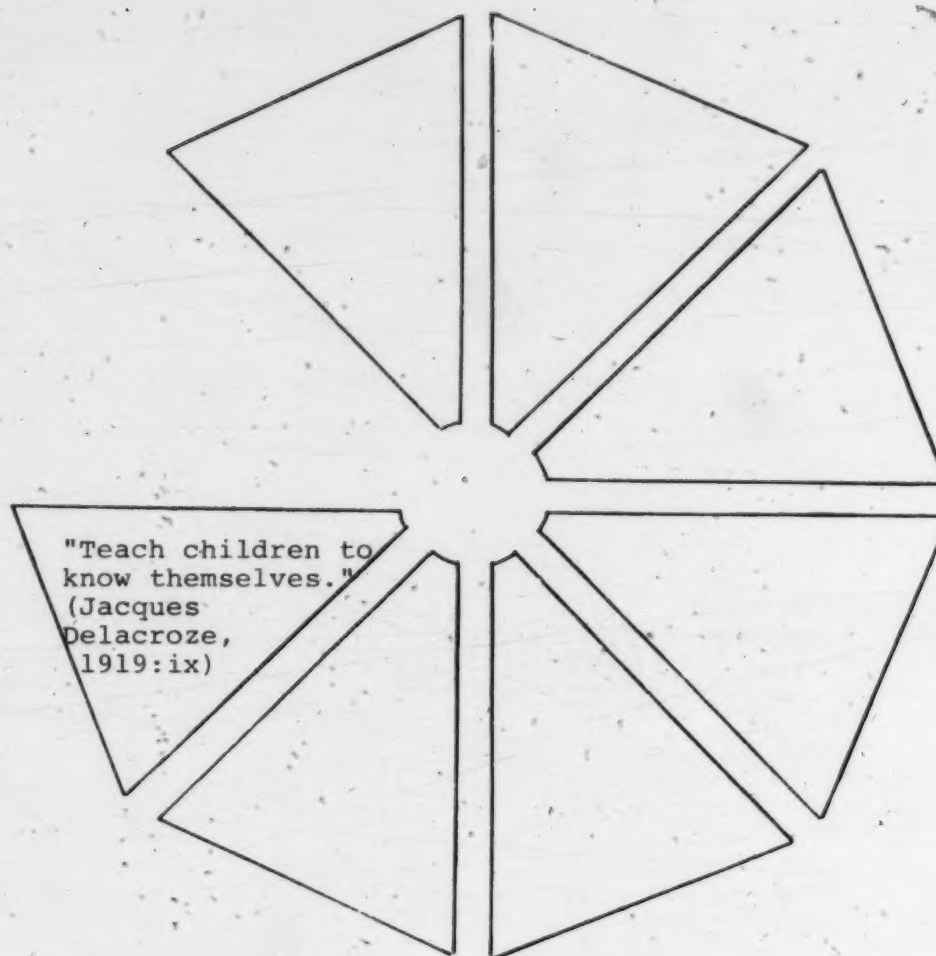
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TRANSCEND THE PRESENT



ELEMENT OF LEARNING

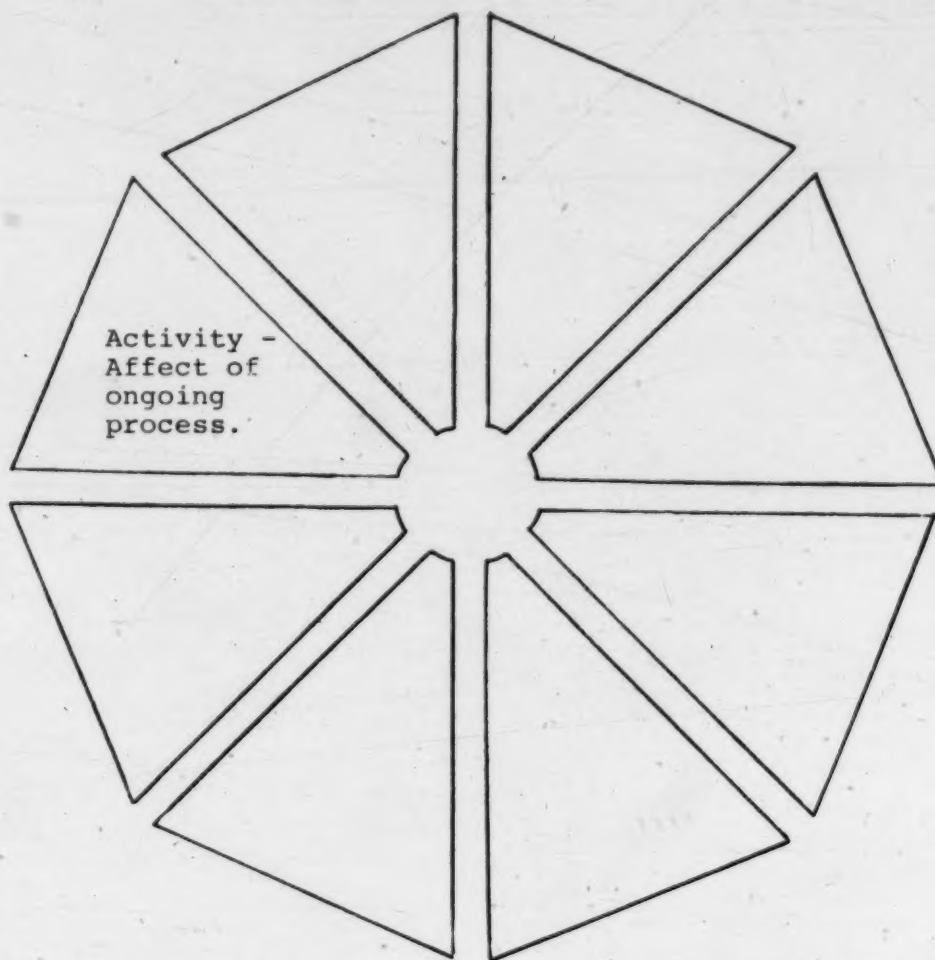
"Language is an act of transcending. Not just a
container for thought but an instrument for
conquest of self by contact with others."

(Merleau-Ponti, 1971:63)

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YNCHRONISE

SYNCHRONISE THE EVENT IN A MOMENT
OF REFLECTION



ELEMENT OF LEARNING

Montessori: "Joy replaces fatigue." (1971:5)

Schachtel: ". . . positive, joyful expansion of
relatedness to the new and rapidly
enlarging environment." (1959:79)

Synopsis

Evoke a momentary arrest of attention.

Lure the conscious attention toward the area of intent.

Encounter the child in a common experience with others.

Mediate the culture while the will is in action.

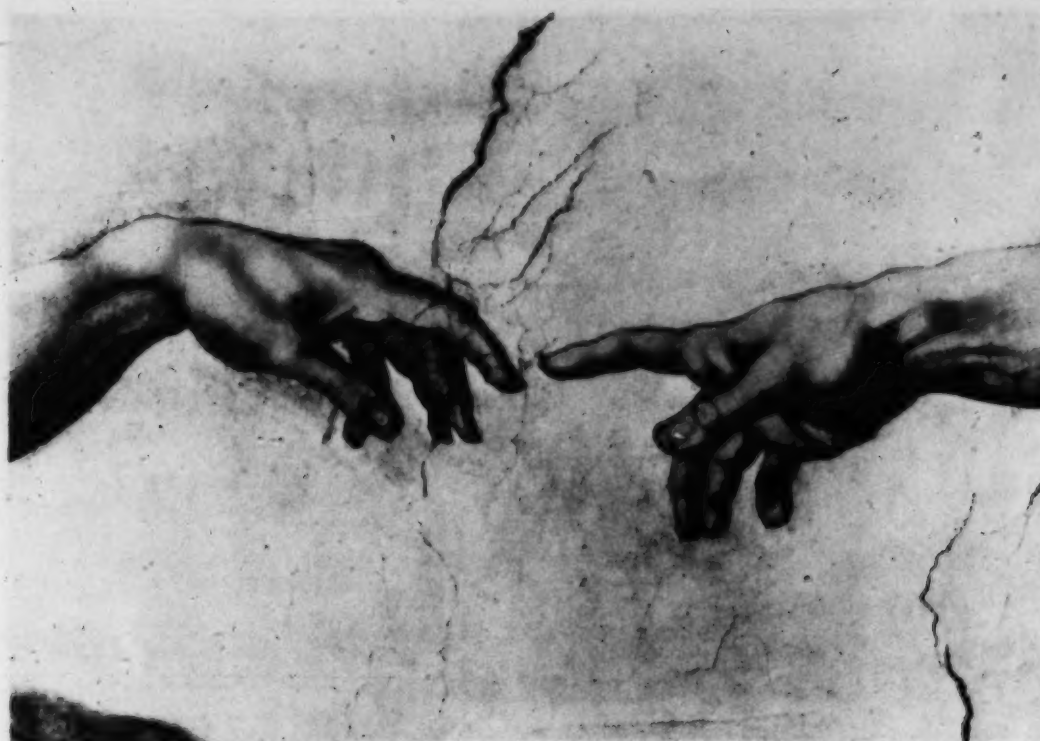
Elaborate to gain objectification.

Nurture involvement toward the moment of the dynamic meeting of thought and word.

Transcend the present and move toward another level of consciousness of self

Synchronise the event in a moment of reflection.

LEARNING



"Man is a singular creature"
(Bronowski)

Michelangelo: The Creation of Adam
(Detail: The Finger of God)

LEARNING IS A PROCESS

Virginia "spoke to us about our simple lives, handing back to us as diamonds what we had given her as lumps of coal." (Nigel Nicholson, Portrait of a Marriage, 1973:207)

The Process Component

The process is what is necessary to put the plan into action. In the design (Figure 2) the spokes connecting the peripheral area with the centre represent the planned interventions of the teacher: the strategic intervention and the reciprocal reaction of the child. There is also an initiated action of the child and a teacher-pupil interpretation implied. This interrelation is the organic component bringing to life the plan, the material and the theories of learning as words embody thoughts (Figure 8).

It is this component that makes the teacher a vital component of curriculum decision-making whether the teacher is aware of this contribution or oblivious of its responsibility. The person of the teacher filters the process limiting and extending the potential residing in the subject-matter and the plan of action. His effectiveness as a teacher will be in proportion to the understanding he has of how a child learns and his experience in directing the learning process. In the enacting of any classroom event the teacher is one of the three forms in

"The web of language winds
us in." Graves

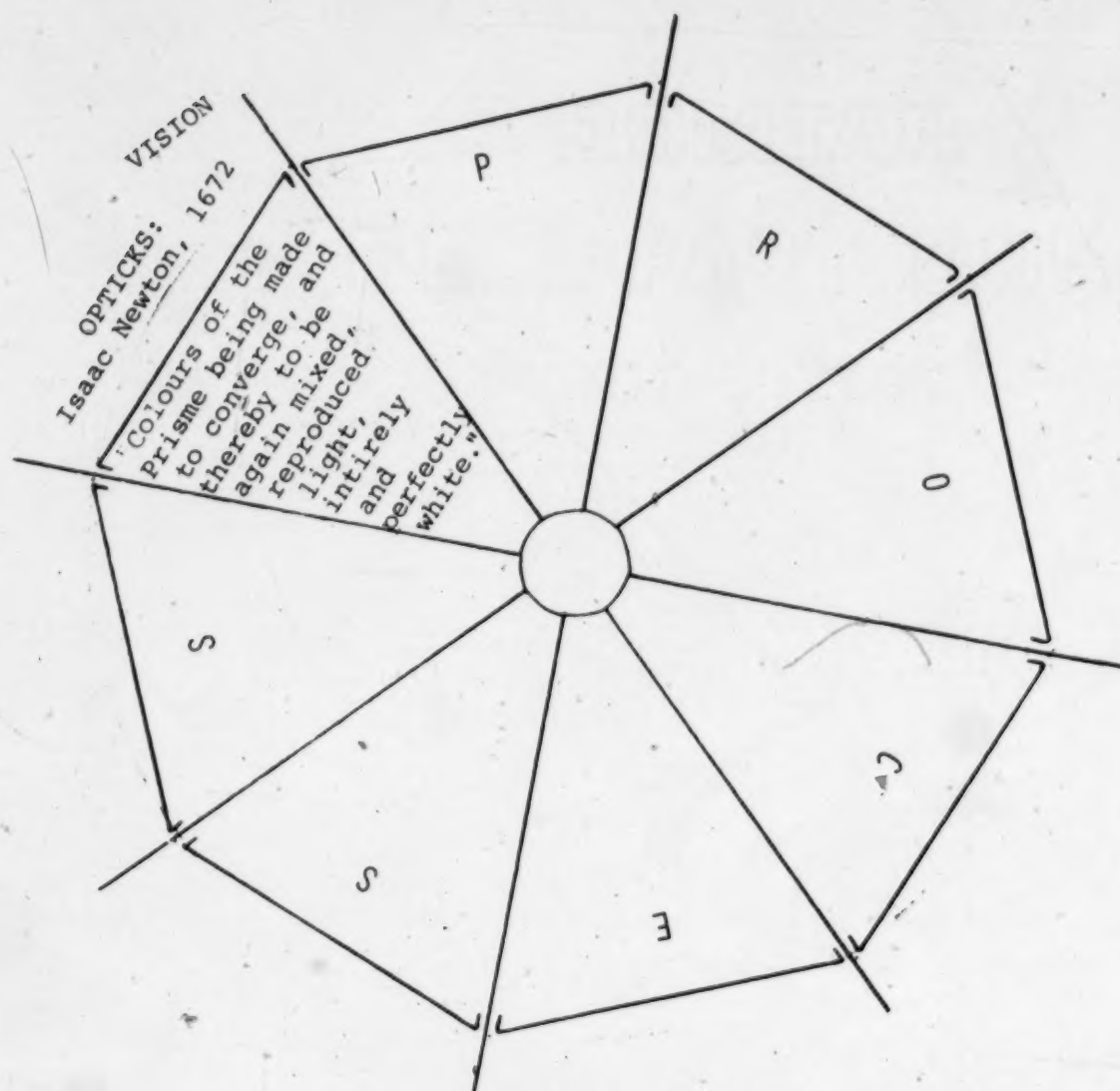


FIGURE 8. Planned Intervention:
A Three Step Component within the Teacher

the process of cultural development. The teacher is the external form (Stage Two, Figure 9, page 93), the social representative, the mirror of reality for the internal person of the child (Stage One). The teacher's task is to prepare a stage where the emergence of this internal form will find a relationship with people. Vygotsky calls this action an "unfolding of the higher mental processes into the drama which is taking place among people" (1966: 45).

Because of this social law in the cultural development of an organism there is no teacher-proof curriculum.

Vygotsky's three-stage process of cultural development is further elaborated in Figure 9 and Table I.

Strategy is intervention. A stage for the performance of this drama of cultural development can be prepared by the teacher. 'STRATEGY' was an interpretation of Vygotsky's three-stage process in cultural development where the teacher contrives a situation which leads to the first step in this process: pupil-initiated action. The following stages in the process follow the natural law where the teacher and other pupils interpret the action for the learner and the external form of his developing awareness is recognised and becomes an internal form. Vygotsky calls this movement from external to internal "intra-mental to inter-mental" (1966:43) and notes that there is a reorganization in the mental function of the

THE THREE STAGE PROCESS OF CULTURAL DEVELOPMENT

Any function in the child's cultural development appears on the stage twice, on two planes, first on the social plane and then on the psychological, first among people as an intramental category and then within the child as an intermental category. (44)

Thus we see what Vygotsky means when he says: "We become ourselves through others" (43).

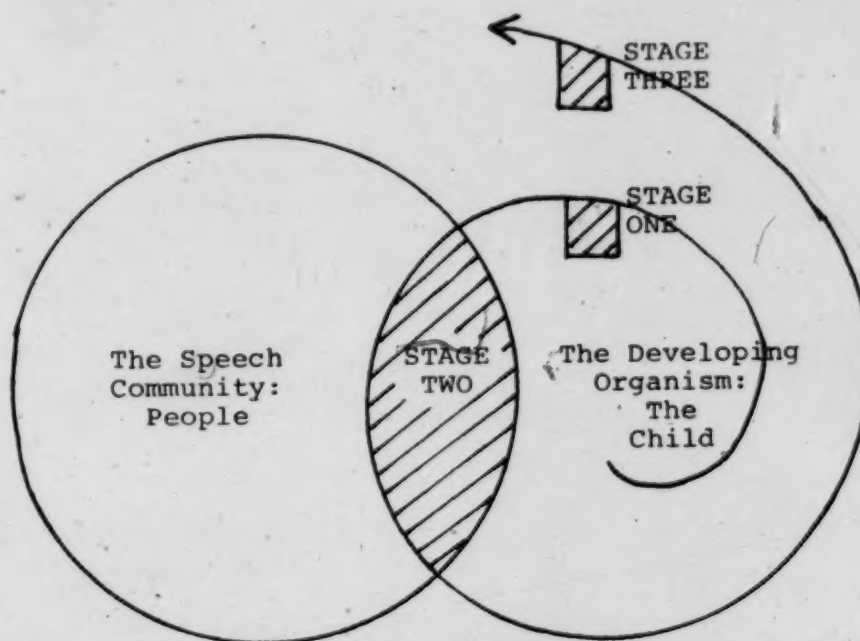


FIGURE 9. Vygotsky's three main forms of cultural development interpreted as a process where the child moves toward complete absorption into the speech community.

Table I
An Illustration of Figure 9
Vygotsky's Three Main Stages Assigned to the Child's Cultural Development
(Vygotsky, 1966:42-44)

EXTERNAL FORM STAGE ONE	INTERACTION STAGE TWO	INTERNAL FORM STAGE THREE
LEVEL I, "Natural forms of direct communication: Movements of touch, cries or looks" (43) A GESTURE: This may be a grasping movement toward an object.	COMPREHENDED BY ANOTHER: The gesture gives rise to the reaction of an adult and the interpretation is given by the surrounding people.	CHILD REALISES HIS OWN GESTURE: The child realises the meaning of his own gesture. This communication was made possible and the meaning and function of the gesture were created, first by the objective situation in stage one, and then by the people surrounding the child. The child is thus the last to realize his own gesture.
LEVEL II Communication involving the speech function: OBJECTIVE RELATION: A word in relation to a thing. EXAMPLE: Helen Keller's introduction to the spelling of the words, e.g. W*A*T*E*R.	COMMUNICATION: The word functionally utilised by an adult. EXAMPLE: Helen's teacher uses the means of the well water to connect the word and the thing on a social plane.	MEANINGFUL OBJECTIVITY: The word begins to exist for the child himself. EXAMPLE: Helen rushes to the house, "eager to learn." Words take on new importance and thoughts. Helen goes on to expand a vocabulary of names and feels a "...kinship with the rest of the world" (35).

learner during the movement.

There is an essential element in this first step of the process. Vygotsky specifies that this pupil-initiated act must mean something to him: "In the beginning the word must have meaning, i.e. a relation to a thing" (1966: 44). This connection of meaning is implied in the fact that the first step is 'pupil-initiated.' The learner is attracted to the new object. The potential of knowing exists for him at the moment of the first awareness; he initiates a reaction to this awareness; his action and/or expression is interpreted by the others in the event; he is presented with this interpretation or 'many-faceted' response; he recognises his initial act and in the process of the movement from internal to external (the first act) and the movement from external to internal (the second mental act), the learner comes closer to "knowing about" his initial awareness (Schmidt, 1973:108). It has become defined for him. What existed for others now exists for him. Vygotsky implies all of this process when he says: "We become ourselves through others" (43). Schmidt implies all of this process when he says: "The thrust toward 'knowing about' . . . has its beginnings in organismic 'reacting to' and maintains its roots there" (1973:108).

Because of this need for 'others,' Vygotsky calls all that is cultural, "social" and all that is "social"

cultural. In the Curriculum View of this study the resource of the teacher, i.e., all that is known as 'subject matter' is represented by the label: The Socio-Culture (Figure 2). This label represents 'knowledge' in the social orientation presented by Vygotsky in his "Genesis of Mental Functions."

Emile's education was planned intervention. Helen Keller's education was planned intervention. To read of the accounts of these pupils is to observe the effects of teacher intervention and the resulting inner awakening of the learner. The teachers used strategies and drawing upon their knowledge of learning theory placed themselves and the child in a context of human interrelation with the desired object of culture, to force the initial stage in the cultural-development process: Pupil-initiated action. Once this first step was taken the teachers directed the next, observing the flow of development. Rousseau recounts how he was pleased with the results of his "strategem" (1911:106). "I knew my strategem had taken effect." Helen Keller's teacher must have been pleased with the energy and enthusiasm for learning that followed the event at the well. Helen's teacher provided in Schmidt's terms an "initial sensory input" (1973:108). The water flowed over Helen's hand and invited all the previously frustrating experiences of now knowing to a dynamic mount of awareness. Helen recalls:

As the cool stream gushed over one hand she spelled into the other the word water, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten—a thrill of returning thought; and somehow the mystery of language was revealed to me . . . I left the house eager to learn. Everything had a name, and each name gave birth to a new thought. (1902:34)

We recall Vygotsky's caution: "In the beginning a word must have meaning—a relation to a thing" (1966:44). "Relation" is the key term here.

In 'strategy' the teacher is working toward building 'a relation' between the student and the object chosen for his cultural development. The teacher builds a context in which this moment of awareness will force a will to act. This act will be the first in the three-stage process of cultural development: The initial sensory input which will give impetus to the natural law of the process. What we are speaking of is the will to act, the will to speak, the will to be involved in the uniquely human process of cultural development.

The driving force of language is the will to communicate . . . that which moves the whole historical development is the common situation of men, their will to coexist and to recognise one another. (Merleau-Ponti, 1973:101-102)

STRATEGY prepared the arena for the initiated action, interpreted action and synthesised action which make up an act of learning.

Structure is controlled direction. This study is based on a philosophy which regards the child as having a potential for cultural development. This does not assume that the information resides within the organism. The facility to learn resides within the organism. The "global will to communicate" (Merleau-Ponti, 1973:99) resides within the organism. Merleau-Ponti further specifies:

that which moves the whole historical development is the common situation of men, their will to co-exist and to recognize one another. (102)

There are two significant elements suggested by this philosophy of learning.

- (i) The organism needs a significant other: A person, through whom his cultural development will be processed.
- (ii) A structured environment containing the germ of the new cultural form will set the organism toward a process where natural laws of neuronal activity will achieve the total end possible for the organism, at this time.

As noted above, the environment of learning must contain a seed of intellect: a breadth of difficulty within a structure which limits, defines, and directs. A structured environment is the learning environment assumed in this study. The significant other is the teacher. The combination of structured environment and teacher provides a socio-cultural matrix.

When Montessori prepared a learning environment for the mathematical concept she had chosen to direct,

she graded her materials in levels of difficulty. The child acting upon these materials processed the basic facts of the concept and as he proceeded through the material each new level of difficulty was processed as an increased level of consciousness of the initial root.

In this way the cultural stream of development is not a meander, as future reflection of it may be. The cultural development, or 'socio-cultural': i.e., seen in terms of human interaction, is regarded in this study as a broad stream rushing, forcing, thrusting as any early development, not yet controlled by its own structure. It is searching for direction, 'wasting' for structure. The material for learning can be strategically placed in the path of this young stream, containing it while it rushes onward in its ontogenetic journey.

The teacher chooses a direction using strategies and his knowledge of the elements of learning. He sets the will of the student in the chosen direction (Figure 10).

The plan in action: the reason and direction of the stream, is deliberately manipulated but the course is delightfully free.

The secret of learning is 'conscious attention.'

The organism absorbs, commits and experiences the interpretation of an event. In Penfield's words, the "diencephalon" is engaged and while "conscious attention" is operating a "memory engram" is recorded and stored (Penfield, 1975:

5,66,105). Activity-affect reaches forward. The developing organism is forced to distantiate and view himself in a world of others.

Learning: a memory engram, has been established in the retrieval system of the brain.

In an address to a Cambridge audience in 1935 Montessori discussed her schools, where:

Culture is actively acquired by the children themselves by means of apparatus scientifically prepared. (1971:5)

Montessori makes several observations that still apply. When noting the 'joy' in learning and enormous progress made by children learning the math concepts with the structured materials she touches on the significance of placing the "personality of the child" in the centre of the school experience.

This could be interpreted as allowing the child to progress as he pleased. She makes clear however that the quality in the child referred to by "personality" is mind. "His mind sets up defences" (1971:6). "The child's mind is depressed instead of aided by school."

Montessori claimed that once she understood this truth she studied ways "of putting children's minds in contact with superior ideas" (6).

In mind's light and in keeping with the focus of this study we read again the claim of Montessori:

We have to put the personality of the child in the place of honour which it ought to have in the school. (7)

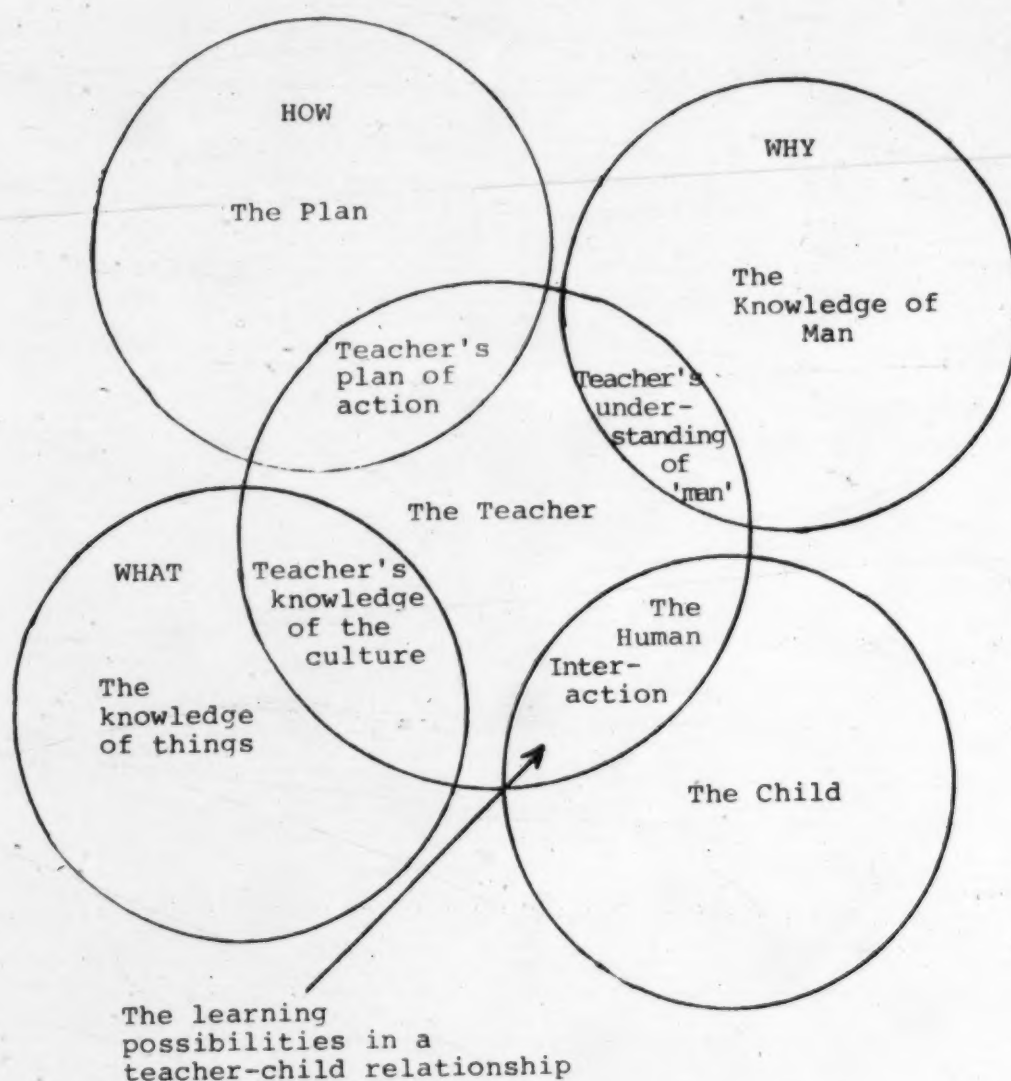


FIGURE 10. THE CURRICULUM IN ACTION
 An interpretation of Figures 1, 2, 3.
 The elaboration of this model is that the child
 acquires culture as a result of the strategic
 intervention of a teacher who prepares a
 structured environment.

In the light of present day scientific observation we listen to Penfield:

A man's mind one might say, is the person. He walks around the world, depending always upon his private computer, which he programs continuously to suit his ever-changing purposes and interests. (1975:61)

If nature has provided the child with a computer which stores those skills and memories to which it has "consciously attended" (Penfield, 1975:61). If nature has given the child "irresistible psychic impulses" (Montessori, 1971:5) which propel him toward the acquisition of those behaviours which interest and suit his needs, teachers must locate this energy and set it toward those pursuits that this society deem to be worthy, difficult, superior and the basic truths of known phenomena.

It would seem propitious to spend time in teacher-training and teacher conferences exploring ways in which this 'mind energy': the person of the child can be captured.

The philosophy of this study is summarised in Rousseau's observation that teachers would be wise to capture the child's will and allow the child to feel free (1911).

Man is a social animal. Social behaviour does not develop naturally but requires training.

The socially acceptable behaviour which can become self-mastered must first be seen and acted out in a

relationship with people. The teacher has the perfect opportunity and a great responsibility to allow the students to play at roles in society.

This study has no sympathy for 'playing around' or providing a playground for chaotic wilfully destructive or irresponsible behaviour. It is based on a firmly structured controlled situation. It provides the students with a shape into which their energies can leap and speak to form something of value to themselves, or to use Vygotsky's words: To become themselves through others. Merleau-Ponti adds to this Vygotskian view: "We see ourselves through the intermediary of others" (1973:46). Merleau-Ponti brings a clear focus to the role of the teacher when he adds:

The adult becomes the most imposing element in the world, the measure of all things. He represents for children their most essential self (moi). (1973:35)

This study assumes that the teacher will select from the vast resource of our known world material of worth and depth, that invites attention and can ensure an extension of that attention.

The study also assumes that the teacher can interrupt the event and can take leadership at any moment when deviance or lack of commitment is withholding the full power resident in the unfolding of the event.

There is space for creative expression and there is a strong expectation of student commitment to the

involvement necessary for such expression.

The difference between the permissive liberal situation and one that is open to development is in the structure and the demand that structure places on the student. The expectation becomes an understanding between teacher and students.

Shape and direction overcome the tendencies to deviate and eliminate the confusion that results in a class of students 'doing their own thing' and 'finding their own way.' A united effort is an economical and powerful use of energy.

"Self-mastery"¹ replaces permissive behaviour.

"Activity-affect,"² or the will to act, makes freedom subservient.

Synopsis. Teachers' skill and energy are required to gain the attention and direct that attention. To reiterate, the atmosphere is not 'freedom-oriented.' The discipline is in the material. The task leads the investigating mind in a prescribed direction. The task takes hold of the energy of the inner self: the will. The 'I' explores and reaches beyond what the 'me' thought 'I' was capable of achieving.

¹Vygotsky (1966:85).

²Schachtel. "Activity-affects: a directed, sustained, activity-sustaining tension" (1959:26).

Two Streams of Mental Development

It is necessary to distinguish two essentially different lines in the child's mental development. (Vygotsky, 1966:16)

As the component in this study called PROCESS is encompassed by Vygotsky's two planes of development thesis, a brief resume of that thesis follows.

The thesis rises from the statement that the higher forms of behaviour depend upon two groups of phenomena: "two inseparably connected but never confluent streams of development."¹ Vygotsky draws our attention to this fact to explain the complex dialectical process of a child's development which is set out below in a table of characteristics.

A. THE ORGANIC BIOLOGICAL STREAM OF DEVELOPMENT

Evolutionary development

Progression is gradual

Change is a development
by means of slow
accumulation

An unfolding embryonical
development

The history of animal
to man

Genetic, biological
character

B. THE CULTURAL HISTORICAL STREAM OF DEVELOPMENT

Revolutionary development

Progression is "sudden"

Change is "sudden,
revolutionary and leap-
like"

The development of the
personality

The history of primitive
to cultural man

Environmental, social
character

¹All references to Vygotsky in this section are taken from Higher Mental Functions (1966:15-37).

Reacts to given stimuli
(inborn reactions)

NATURE: Lower mental
functions:
mechanical memory
involuntary attention
impulsive volition
creative imagination
imaginative thinking

Reacts to created stimuli

THOUGHT: Higher mental
functions:
logical memory
voluntary attention
previsional volition
reproductive imagination
conceptual, verbal
thinking

The meeting of these two planes of development is described by Vygotsky as a "clash" of the primitive form of one's own behaviour meeting the developed cultural forms of behaviour. This clash may result in the "sudden leap-like change" which is a developmental point in the movement toward higher mental synthesis. Vygotsky uses the term "dialectical leap" to describe the process of cultural development. The resulting development is a "qualitative change in behaviour."

Teachers are engaged in the business of structuring an intellectually stimulating and culturally challenging environment which invites the meeting of these two forms of behaviour. Vygotsky in his 1966 publication refers to the "strenuous mental activity" requirement in a child's concept development. School instruction is a powerful force and determines the fate of the child's mental development (85).

It is toward the nature of this school instruction that this study reaches.

In summary, mental development is not embryonically



Leonardo da Vinci in Bronowski, 1973:414. The Brain and the Baby: This study chooses to use this sketch in an attempt to capture the dialectical process in ontogenetic development.

evolved but the result of a meeting of a child's own form of behaviour with an antagonistic form: a new developed cultural form; and the leaplike change that may follow such an encounter. The resulting qualitative change will be in the nature of revolutionary insight and a new plane of vision, and thought. The change will be accomplished by the learner through self-mastery and as a fact of will. The progression of development is an ontogenetic journey which takes place in a socio-cultural environment and could be seen as a continuum of distantiation where each step involves the mediation of culture, and each step illuminates the person in relation to his world.

The process involves two streams of mental development. Leonardo's sketch reproduced on page 107 of this study captures the dialectical process in man's development: the complex combination of 'history' and 'its product': 'brain' and 'baby.' As well as bringing the educator's attention to the complexity of the teaching task, these thoughts suggest the wider historical perspective of: the present, living the past.

The brain represents the evolutionary product of centuries. Bronowski compares a million year old skull which would possibly contain a human brain of one pound weight with present day man's brain weighing three pounds (Bronowski, 1973:415). The weight increase is explained in the increased structures which man has added to cope

with the complexities he has established in his relationship with his environment.

The baby represents the future man who will act upon his environment and contribute to developing brain structure in the evolutionary process. He will use his brain to interpret the present and to shape the future.

To recapture the strands we have considered in man's cultural development, we are considering:

HISTORY: THE EVOLUTIONARY STREAM: THE BRAIN.

PRODUCT: THE SOCIAL STREAM: THE BABY.

The complexity of the task of a teacher is compounded in this dialectical process of man's development. "Man is a singular creature, whose intellectual development is on two planes."

Learning or 'qualitative change' in the ontogenetic development exists: comes to life; in the moment of 'clash' that constitutes the meeting of these two forces: the brain's evolutionary developmental forms meeting the social present. The teacher's role provides a cultural form in a social environment. The teacher plans and structures the meeting of culture and attention.

In Penfield's terms a 'memory engram' is recorded as a result of the stimulus of this clash. This learning is established through the facility of "conscious attention." Penfield suggests that in the power of this 'conscious attention' to inhibit or present data, is the

"secret of all learning."¹

To view the complex process in an integrative frame of reference is to see movement expanding and reducing as a range finder on a camera: focus wide, focus tight. This is a continual interaction: an ever spiralling movement whose convolutions become increasingly more comprehensive.

In summary:

What is first 'external' becomes 'internal.'

What is 'evolution' becomes 'involution.'

What is 'history' becomes 'its product.'

The abstraction of such a process is best captured by the poet.

Not in vain the future beacons
Forward forward let us range
Let the great world spin forever
Down the ringing grooves of change.

(Tennyson, "Locksley Hall")

Learning. In an event, the input of the meeting is received in the sensory area of the brain and the energy mechanisms of the brain are alerted. This energy area is located in the diencephalon: the higher brain stem. Here the energy is of two types says Penfield, one that alerts brain mechanism and one that alerts mind attention. Brain mechanism can operate independent of

¹Penfield observes this in "The Record of Experience" chapter of Mystery of the Mind, 1975.

the conscious attention of the mind but the mind energy located in the higher brain stem which to an educator must be vitally significant and can best be considered as the "conscious attention" must be operating if the experience is to be: (1) passed on through neuronal channels to the interpretive cortex having by synaptic function a duplicating partner in the speech cortex and most important to learning, (2) recorded in the frontal lobes, 'the uncommitted cortex' of the human brain where the hippocampus will scan and select the recorded engram of memory in future recall and concept building experiences (Penfield, 1975).

Any decision-making commitments or interpretive use of past experience must engage the conscious attention and hold the conscious attention throughout the process of recall, and memory building must also engage the conscious attention and hold the conscious attention throughout the process of recording.

Penfield notes that an automaton is 'mindless.' This state does not inhibit the brain energy function. Automaton action was observed in epileptic patients to be quite complex and difficult tasks were accomplished by them. However, there was no access to decision making and no ensuing record of consciousness. The automaton, Penfield notes, is also without a sense of humour. A significant observation of Penfield's is that the automaton

state was never induced through the sensory or motor areas. This would indicate that the mind would attend those behaviours stimulated by sensory motor function of the brain. Penfield remarks that this function has been largely overlooked. Educators would be wise to pursue the investigation of mind attention and its relation to the areas of the cerebral cortex.¹

When have we got it?

How do we hold it?

The investigation of conscious attention must be considered as a vital area in teacher education. Observation of baby activity must have some input for teachers. Observe arrested attention—observe exploratory play—the developing speech patterns—the related experiences. Teachers must need this understanding. It is the foundation upon which we build. The structures must fit the foundation and become part of it. Structures which are simply stacked upon a foundation hamper further development. Erroneous structures have to be removed before the foundation can support further building.

If teachers are to assist in the socio-building of mental structures which have their foundation in the evolutionary stream of development, then they must know something of the history of this evolutionary development

¹Penfield, *Mystery of the Mind*, Chapter 10 "An Automatic Sensory-Motor Mechanism," 1975.

(Figures 11 and 12). What was man? What has he become?
What is he becoming?

These are key issues in teacher education because they are concerned with MAN the nature of whom teachers play upon.

When considering the teacher in such a leading role one is reminded of Shakespeare's message:

He who plays the king is welcome.¹

Teachers know that there are many times when 'He who plays the teacher is welcome.' Nevertheless, a teacher who understands the power of conscious attention, the learning process and the place learning plays in man's evolution, is not daunted by the roles a teaching career will demand.

¹A theme throughout Shakespeare's history plays.

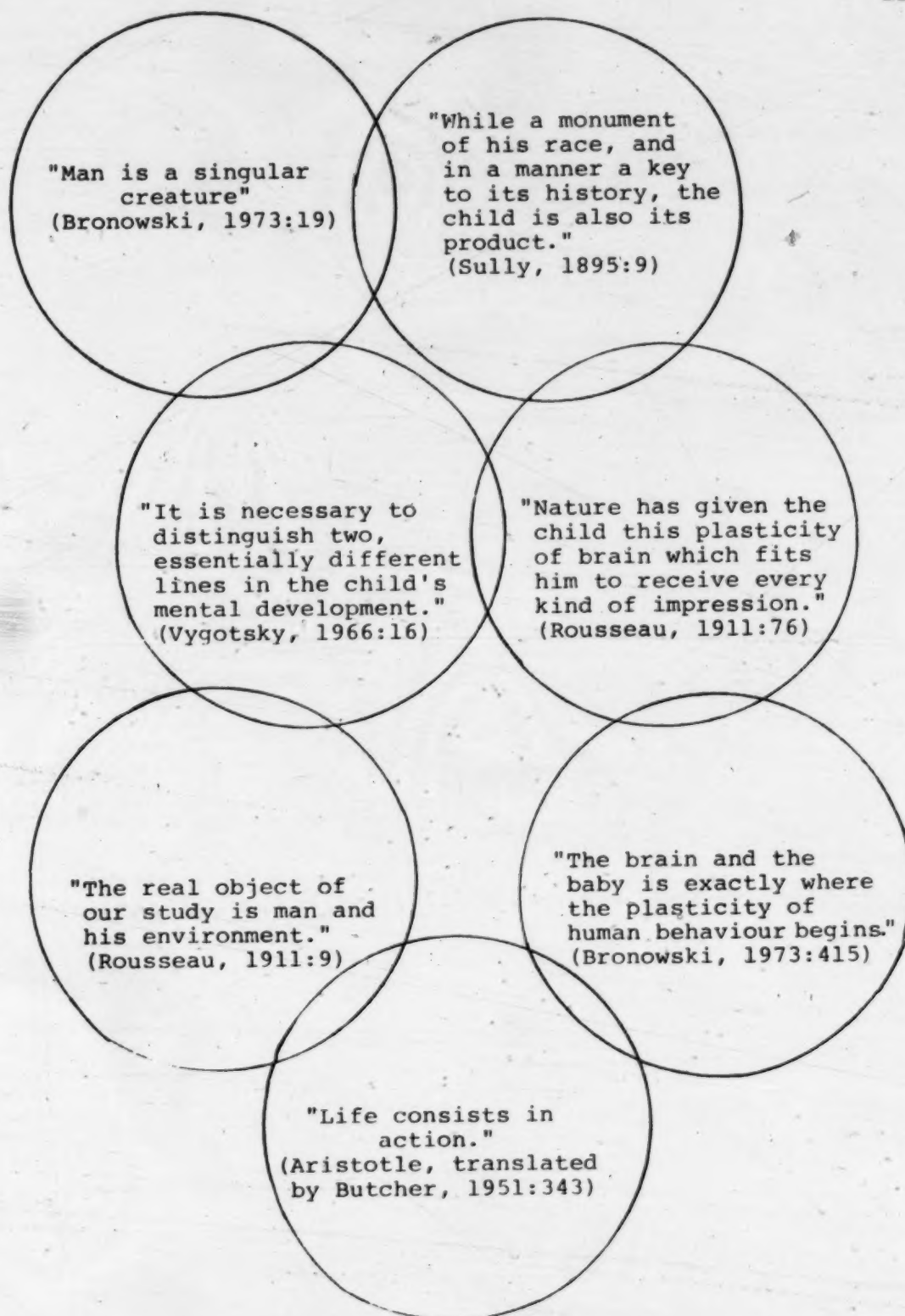


FIGURE 11. AN INTEGRATION OF CULTURAL-DEVELOPMENT CONSIDERATIONS

It is here that decisions are made on "Where we want to go."

It is here that science
can tell us the best way
to get there.

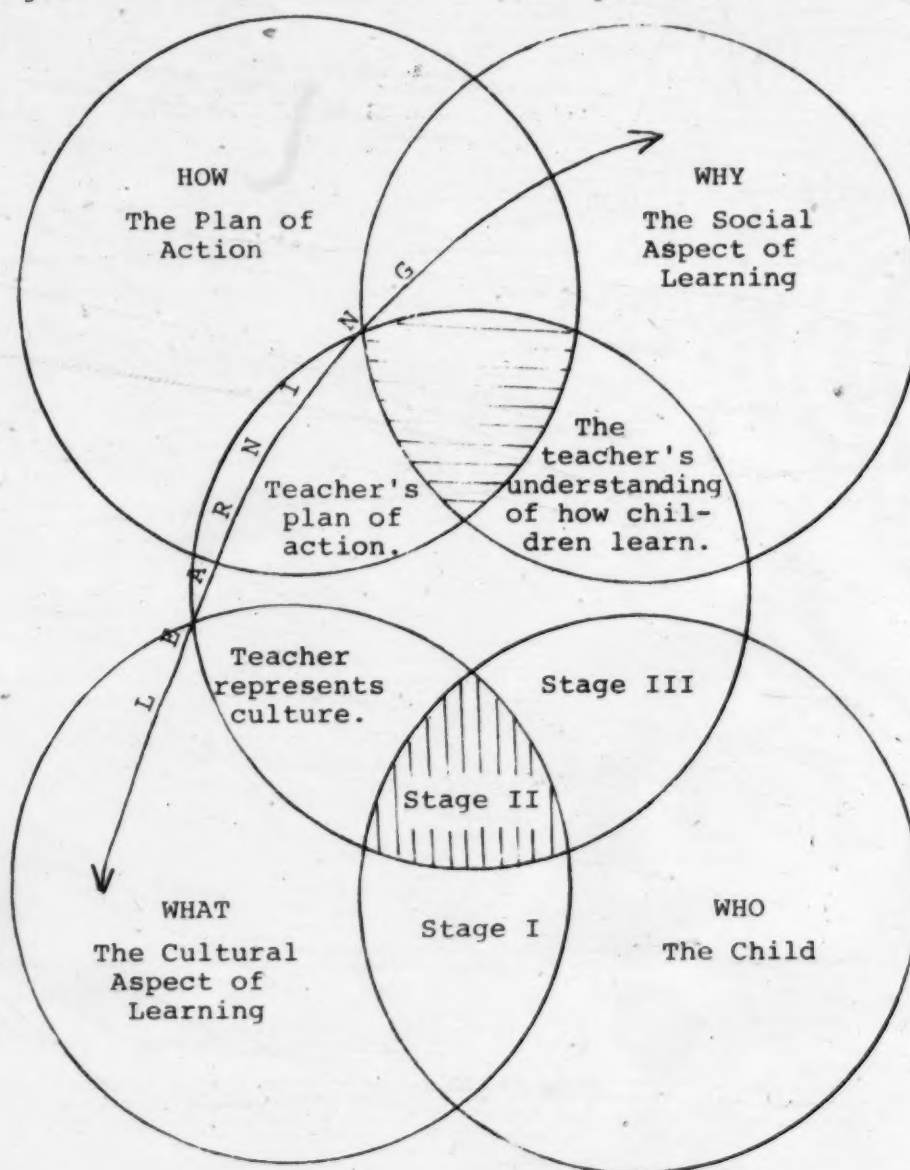


FIGURE 12. LEARNING

Stage I is the child's initial awareness of the culture.

Stage II is where the teacher meets with the child and interprets the culture. (The Plan in Action)

Stage III is the child's recognition of his first act Stage I. (Teacher is observer of this development.)

Figure 12: Learning, is a guide to the aspects of learning that are included in the section called PROCESS.

i) WHAT, the cultural aspect of learning:

Pages 92-97 set the learning process in a scene of cultural development. Vygotsky's three stage process is examined. The figure integrates the three stage process with the curriculum model which has been developed throughout the study.

ii) WHY, the social aspect of learning:

Pages 98-104 recognise the two streams of development in our ontogenetic stream. Within these two components (i) and (ii) are aspects of learning considerations such as: Structure (page 98), conscious attention (page 99), the environment of expectation (page 102), issues for teacher consideration (page 103).

iii) Teacher, the WAY to learning:

Page 132 captures some aspects of teacher in the process, culminated by teacher training implications (page 137).

FIGURE 12 (Continued)

VI
THE
ACH
HING

TEACHING: A SPECTRUM OF ROLES

In an attempt to bring the processes to the classroom arena we must view the process in a variety of teaching styles and teaching roles. The teacher is involved in many and diverse ways (Figure 13):

Teacher as a source of light, Teacher as the knowledge, Teacher in the process.

Teacher as a Source of Light

The following is an attempt to elaborate the analogy of the deep structure present in a learning experience. Residing within the planned action and evoked by the strategies in a hidden structure, the possibilities that exist in classroom instruction. The plan of action is not a flat surface but a solid shape, a prism representing the many faceted world that school experience can represent to the student. It is present in every classroom situation but it is not always utilized by the teacher. As a prism requires a source of light to refract the colours of the spectrum, so the plan of action requires a light to refract the spectrum of attitudes which reside in the individual in the classroom.

*Light is the transforming quality, the awareness.
The teacher has this power to transform the plan
of action into form.*

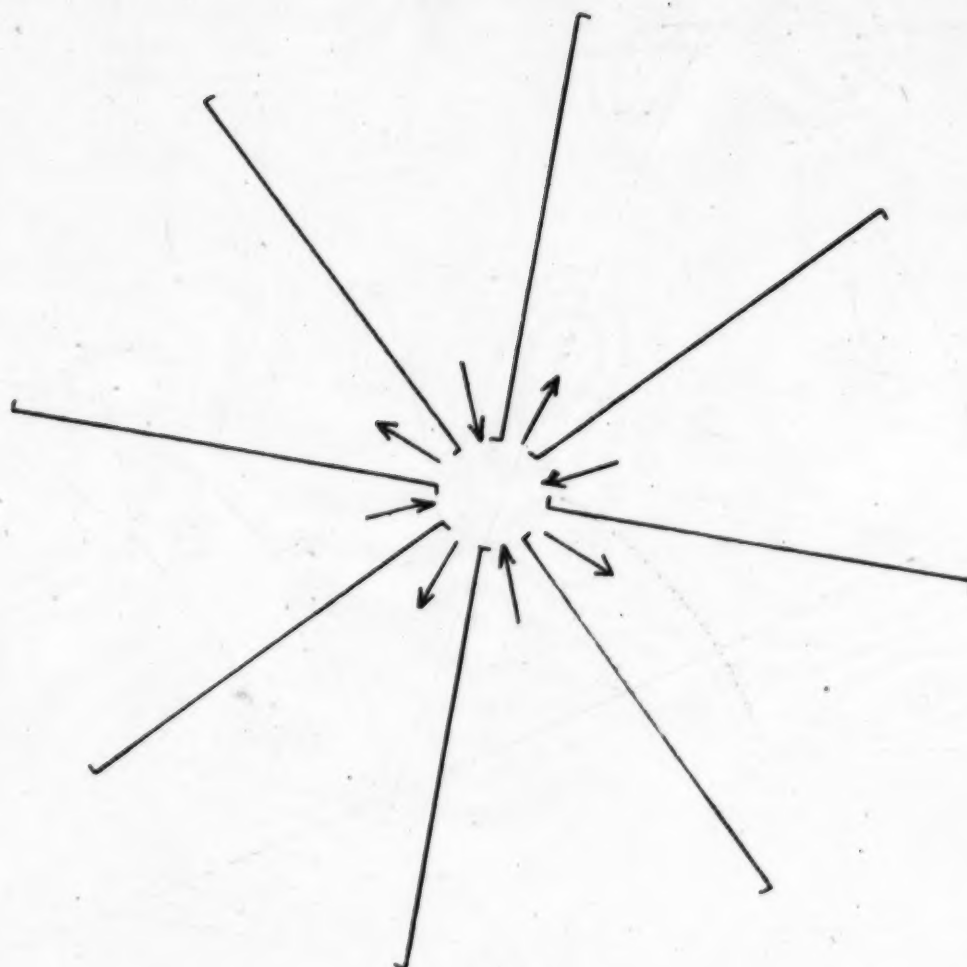


FIGURE 13. THE TEACHING PROCESS: is Planned Intervention

Bronowski provides an interesting reference when he describes Newton's "optiks" theory (1972:332). Bronowski observes that the coloured surface of things became of interest. There was also an awareness of the deeper solid structure that builds up from the inside: the total form of an object or a body. The total form which was the hidden structure underlying the coloured surface of things became of great interest to artists and scientific experiments in discovering shapes of crystals and elements. He speaks of the constituent parts of things. This study is also looking at the constituent parts of things in the classroom environment.

Butcher (1951:339) translates Aristotle's theory of poetry and fine art. He brings another significant reference to this analogy of structure. Butcher describes the theory and notes that Aristotle's method of dealing with the fine arts is to analyse the "organic parts of an artistic whole" (342). In this analysis there is a reference to shape and form. Aristotle describes character or ethos as a "daub of beautiful colour" (346). He describes this colour as having no shape. Aristotle's description of plot suggests a design or a ground work, a silhouette in which character, the beauty of colour and form can express itself. Aristotle's description of the organic parts of drama is not unlike the description this study attempts. Character ethos being the organic person

of the child, and plot being the plan of action or strategy which a teacher will use as a design in which the colour and form present in the person of the child will find expression. The child can use the medium of drama as a vehicle of distantiation.

The most beautiful colours, laid on confusedly, will not give as much pleasure as the chalk outline of a portrait. (Butcher, 1951:346)

The colour contained in form is the life contained by the strategic structure of a classroom learning experience: The child in the learning process.

This study has chosen the spectrum phenomenon to illustrate the hidden form in the surface shape of a classroom plan of action.¹

A light analogy. On walking into a limestone cave one is hesitant and fearful. The deepness is felt and the darkness ominous and enclosing. Lights suddenly reach out and the deepness and darkness are illuminated and inviting. Wonder and excitement replace the fear and hesitancy.

On entering school a student, whether reticent or aggressive is feeling the oppressive darkness of unknown presences. He is fearful of his own steps in the dark. The many new forms of behaviour represent confusion. The teacher has access to the light. He is the facility which can illuminate and invite, transforming a dark, oppressive

¹See 'Spectrum' pages 71 and 143.

event into an awe-inspiring scene and an exciting journey. The light refracting from the surfaces of a limestone cave is at first a momentary arrest of attention for its viewer. It is only on further investigation and inquiry that new wonders exist and one seeks out the detail and discovers the complex formations which make up the uniqueness of the limestone phenomenon. The discovery possibilities exist when the light refracts the deep structure. Tunnels are doorways leading on to greater discoveries. If one turns off the light the depths of the structure which are always present become inaccessible to the viewer.

To extend the cave analogy, one could consider the possibilities of further discovery. If one was committed and interested enough to pursue further discovery alone, one could take one's own light and on entering the cave pursue the journey alone having the light; the awareness of what exists; and knowing where to enter the cave. The initial sensory input: the awakening scene of the initial visit to the cave with a guide and as one of a crowd always remains as the first step in the levels of consciousness leading to the concept development of the cave experience. This initial experience could grow in increased levels of consciousness. The guide's light is replaced with the individual's light. The crowd is replaced by one's own personal discoveries. The guide's direction is replaced by one's own pursuit of knowledge

driven by what Schachtel would call "activity affect"; an ongoing process of development (1959:25).

In contrast to this awakening is another introduction to the cave concept. The lights are full and exposing. The crowd enters, sits down and the instructor points out the features defining and differentiating the phenomena of limestone formations. The visit is long but during the time the facts contained in the experience are exposed and inquiry is illuminated by the brilliance of the instructor's oratory and performance. The crowd rises and disappears. The lights go out. There is a form of finality and a completeness about the process. There is no necessity for an enquirer to return. No touch. No question.

Thoughts. We are reminded in this example of Bronowski's words that knowledge is not a "notebook of facts" (1972:436).

Rousseau, in his treatise of education Emile, warns against the expository treatment of facts and encourages teachers to spend time and wait for the pupil's own investigation to pursue the initial strategy of the teacher. In this study which adheres to Vygotsky's concept of learning being a "living process" the teacher is given a leading role to play. Illumination or exposition is the choice of the teacher. Will the teacher illuminate and encourage "excitement in intellectual pursuits," or

reduce knowledge to a "notebook of facts."¹

It is time to look back to Figure 1 and consider teacher decision-making:

What am I doing?

Why am I doing it?

In approaching the initial aim of 'Strategy' a teacher could choose between several intents. When considering the WHAT component the intent could be:

1. To cover the events of Imperial Rome, or
2. To spark an awareness of and interest in the past.

When considering the WHY component the learning elements chosen could be to teach the child to:

1. Know the facts for regurgitation, or
2. Illuminate himself in the world of others and come to understand the history of our race.

Short term tactics or long term strategies will be the resulting method depending on the teacher's intent and corresponding decision-making.

Teacher as the Knowledge

Teaching can be a guessing game. The teacher is the knowledge: The students guess. "What word am I thinking of?"

A grade one teacher stands in front of a large

¹Direct quotes taken from Bronowski (436-437).

group of six-year old adventurers. She demands from them a word that fits the pre-conceived slot in a pre-conceived tactic. "No, John." "No, Sally." "No, Simon." "No, Butch." "Think, now." Every answer has potential. Each word, "a microcosm of human consciousness" (Vygotsky, 1962:153), exposing the shaping quality of these enthusiastic children. As an observer attempts to retrieve a word that may be the missing answer, she is impressed with the speed and focus of these little ones. No one can retrieve the word. It is supplied by the teacher. The search is over. We proceed to the next tactic. On reflection the observer notes that the words supplied by the little ones were as appropriate than the desired one. The words that seemed to provide a 'spectrum of attitudes' illuminated the teacher's plan and gave it a beginning. The word sought, once supplied provided an ending. Who said to these children: "Your words mean that too." "Your words are important." They did not provide the word needed. They must have misunderstood the teacher's meaning if their word was rejected. They still don't see why their word is inappropriate. Maybe they'll keep their ideas to themselves next time and avoid exposing incongruent thought.

A teacher represents the knowledge but is not the knowledge.

5
A university professor stands in front of a group of students. He demands of them a label for the pre-

conceived theory he has developed over the years of his long specialisation in literature. He cleverly rejects the 'spectrum of attitudes' which result from student interaction with the material. Laughter, rejection, dismay, ridicule break the refractions of spectral light. The lights go out. The professor provides the answer to the riddle. The game is over. The spectrum is emanating from the professor. He glories in his achievement. The students file out feeling inadequate, restless and unfilled.

A teacher is one attitude in a spectrum of attitudes.

What is happening in these erroneous teaching styles? In the search for a concept specific to an external idea a student reviews past experience and searches for a match that can only be found in the past experience of the one who experienced the initial sensory input and developed the ensuing levels of consciousness pertaining to that particular concept. The student is searching within himself for something that has been developed in the person of the teacher. This is of course impossible. There is only one person who can supply the referent for the concept and that is the one who experienced and developed that idea. Student expression will reflect individual reactions rooted in their own relationship with that particular concept. These expressions will not necessarily be unrelated to the expressions of others but

will be a 'spectrum of attitudes' not one attitude. To place a limit on the expressions of attitude is to place a vice on the exploratory quality of the human process of intellectual development.

For a teacher: the light-source, to turn this light upon himself is to atrophy the learning process. If the teacher is engaged in selecting the required material to provide a storehouse of knowledge for the student's future use he is providing the light for that student's growth in intellectual pursuits and this activity will not, in Rousseau's words, "reflect glory upon their tutors and governesses" (1911:76). Methods of learning have not changed since Rousseau's time nor have person's involvement in the process. There are degrees of effectiveness depending on the intent. Does the teacher wish to engage the child in intellectual pursuit or to gain personal recognition as a pedant? The method chosen will be influenced to a large degree by the teacher's view of childhood and by the degree of uniqueness preserved in the person of the teacher. The focus is on the student or the teacher.

The child is in a sense imprisoned in the school years. This does not necessarily mean that the unique quality that makes him a singular creature is imprisoned. Bronowski illustrates this uniqueness when he notes that man is not fitted to any specific environment, "... he

is not locked into his environment" (1972:19).

*If biological evolution "fits" man to all environments
then why should a teacher impose one?*

Rousseau spoke against the physical binding of babies and the need for freedom of movement and the freshness of air. Two hundred and fifty years later the Western world cannot be blamed for binding and deforming the body. Size, strength and vigour of body must be praised in youth of our Western world. Rousseau however also spoke out against the binding of the intellect:

What is the use of inscribing on their brains a list of symbols which mean nothing to them? They will learn the symbols when they learn the thing signified. (1911:76)

Two hundred and fifty years later however, although we have come to a greater understanding of the "plasticity of the brain" (Rousseau, 1911:76; Bronowski, 1972), we are still caught up in erroneous methods of teaching which destroy rather than preserve the unique, singular, human quality which not only ensures individual progress but human progress.

Bronowski calls this unique quality "moral imagination." He urges that we pursue the knowledge of man and that intellectual pursuit be everyman's right not the right of an exclusive group of specialists. The democracy of the intellect is every person's right to a fuller knowledge of himself in relation to his environment and his

fellow man within the larger perspective of where he evolved from, while engaged in the exciting drama of where he is helping man to ascend.

The exploratory drive—the uniqueness of man must be free.

What is Teaching?

Teaching is more than keeping the children occupied and quiet and education is more than an accumulation of statistics on school files. We all know this yet emphasis on standardised tests in the basic skills is a swing to visible results and a swing to visible results puts teachers on the defensive and students on the production line: An unhealthy environment for learning.

An example of visible result education is a report written on a student Gregor Mendel:

. . . lacks insight and the requisite clarity of knowledge.

This student failed to attain the formal diploma as a teacher. He began work on plants in the monastery and over eight years of experiment formulated the genetic rule that still bears his name. At the time of publication we are told no one understood his work, or recognised its genius. When he died all his papers at the monastery were burnt. The present study of genetics stems from Darwin's theory and Mendel's discoveries. It is profitable for a teacher to consider the number of people like Mendel

who have failed formal education and produced a theory which required vision and intellectual capacity. One biologist influenced Mendel. A teacher who encouraged inquiry and was courageous enough to search for the facts and reasons for appearances.

Visionary ideas may not be in a form we applaud in the classroom, they may not even be recognised. Memorisation of facts may not be the particular skill of an active imagination. Conscious attention must be engaged.

Teachers, respect the uniqueness of the pupil; consider his dignity as a "singular creature" (Bronowski, 1972:19).

Systems, respect the uniqueness of the teachers and their right to promote learning not destroy its source.

The future environment will be shaped by the individuals we fashion today.

In this year of 'back to the basics' it seems necessary for teachers to take courage and do what they know they have to do, sometimes in spite of expectation and time patterns imposed by those whose sympathies are not governed by the same knowledge of human interaction.

Teachers have to reach out and touch people. Teachers have the light source of cultural heritage. Teachers can't hold back information. It belongs to the new generation. They need their inheritance to move man forward. They need a store-house of knowledge but it is

not facts, it is the giant plan of where those facts fit: The mosaic of what we know of man's adventures that will give perspective to the piece of adventure we are engaged in today.¹

The teacher is represented in the Curriculum View Figure 1 as the process step. In the fact of the action however, the teacher is:

The process step but not the process;

The culture representative but not the culture;

The light source but not the light.

The teacher is in Rousseau's words: "Controlling without precepts, and doing everything without doing anything at all" (1911:84).

In our example (p. 121) the guide who leads the group through a rock entrance, through the tunnel to the cave interior; will caution the crowd and tell them to wait as he moves to where he can manipulate the electronic device which supplies the light. The light illuminates the material and the viewer enters into the experience. The guide observes.

The guide is not the light.

The guide is not the limestone phenomenon.

The guide has done everything to bring the viewers to this threshold of experience yet done nothing in the

¹Much of this philosophy is the inspiration of Bronowski.

process of interpretation and synthesis of the material. This act will always be individual. It is the 'leap' in cultural development.

The human act of processing new experience is an intellectual leap in Vygotsky terms. To integrate the words of those whose work has brought this writer to this view: The individual leap is the emotional equipment meeting the intellectual commitment in a step toward the emergence of that unique individual in the ontogenetic journey toward knowledge of the self. (Figure 14).

The teacher does everything but appears to do nothing in this complex process of planned intervention in the classroom arena of learning.

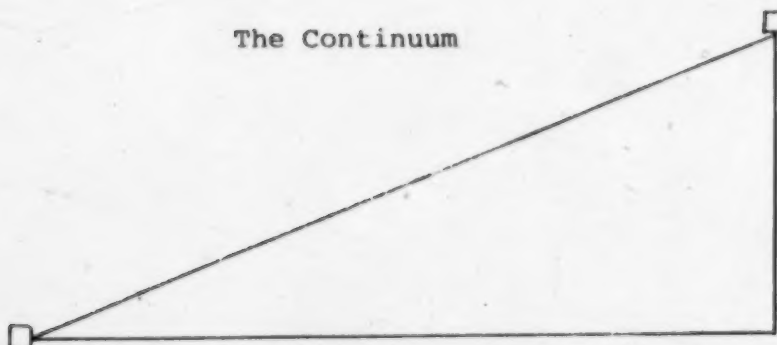
Teacher in the Process

Knowledge is of no use unless it is acted upon—transformed into a consumable form. Water, tea leaves, sugar, a teapot, a cup, thirst for a refreshing drink, will not make the act of drinking tea a reality.

There is a process step involved during which the ingredients are forced to integrate. One needs a container and heat: a form of force.

The experiment of Miller (Bronowski, 1972) was facilitated by combining atmosphere in a flask; applying heat and electric discharge to force the mixture into form. There was a transformation. Amino acid, a life quality, appeared inside the flask.

The Continuum



A. No space

The world and the person are one. The neonate is not aware of distance and therefore has no action-space.

B. All space

The Supreme being is "king of infinite space." This is an ideal state of being, described by Blake: "To see the world in a grain of sand and eternity in an hour To hold infinity in the palm of the hand and heaven in a wild flower." At this supreme level of distance the person is space as spacial and temporal terms are objectified and completely reduced to "symbolic rendering."

FIGURE 14. A CONTINUUM OF DISTANTIATION:
The continuum of consciousness leading from no self-knowledge toward the complete discovery of self, in a world of others.

The experiment of Orgel took the basic constituents and put them together in water and used a process of freezing to force or pressure the mixture into form. There was a transformation. Organic molecules appeared on the top of the ice.

The classroom can contain the basic constituents and a willing student, but not succeed in making "qualitative transformations in the learner" (Vygotsky, 1966:36).

Intervention is absolutely crucial. It is here significant to reread the words of Vygotsky:



. . . the development of changes in the child takes place in an active adaptation to the external environment . . . ever new forms arise in this process. (1966:26)

Vygotsky is distinguishing these cultural developmental changes from embryonic evolutionary development change. Not therefore an unfolding of "internal potentials."

He reiterates: the "New stage arises from actual clashes between the organism and its environment" (38). We in education are in this cultural environment and we are involved or should be concerned with such changes in the child and such clashes with environment. There must be intervention and who else but the teacher can take the constituents and place them together in a process? How else can the teacher do this if not by the use of STRATEGY?

It is not only the teacher's role but the teacher's reason for being part of the learning process (Vygotsky, 1962:35-38). To sit back and observe other clashes within

the environment of the classroom (that is activity without strategy or structure) is to truly waste the valuable time of the child's cultural development and pretend to be taking a part in education. A teacher must be involved in strategic intervention.

The teacher, like the experimenter of organic chemistry, selects the basic constituents and provides an event for the meeting and a force for the transformation which will take place when the "primitive forms of the child's own behavior meet the developed cultural forms of behavior" (Vygotsky, 1962:37). Transformation or change will be sudden.

Vygotsky calls the occurrence of cultural forms of development "sudden and leaplike changes" (37). It is not coincidental that the language of organic chemistry and the process of organic chemistry are suggestive of the cultural changes in the process of higher mental function of an organism. The science of life-form and its origin is not unlike the study of concept formation and its origin. Bronowski discusses proteins as the building blocks of life: the constituents of all living things. Concepts are the building blocks of intellect: ideas the constituents of all living thoughts.

Peering into the caldron of Miller or Orgel's atmospheric experiments—and watching what must be 'magical' appearances of new formations is to see sudden

and leap-like change in the chemical structure (Bronowski, 1972:316-317). The great difference for a teacher-experimenter watching the results of his strategy is that he cannot look into the caldron of the brain and watch the complexity of the process and observe the leaplike changes in the appearance by change of colour or a formation of matter that is the result of the 'clash' of the child's evolutionary stream of development meeting the new cultural stream and forming the living substance of a new concept. Sudden and leaplike changes in the appearance by change of colour or a formation of matter that is the result of the 'clash' of the child's evolutionary stream of development meeting the new cultural stream and forming the living substance of a new concept. Sudden and leaplike change must be visible. Its presence must pervade every behaviour that follows that moment of change. The leap, Vygotsky says, is "regarded as a point in any line of development as a whole" (1962:37).

The teacher will be aware of change.

Visible evidence may not be on hand.

Parents know that the child has taken a step in the 'ascent of man.' Teachers have to take their courage and their satisfaction from this change they know exists in the person of the child and the confidence they earn from the parent of that child.

This courage is necessary for teachers to establish

their professionalism and continue to prepare events and conditions for the child's cultural experiences.

I am the scientist in this cultural creation. My results are proven in the child's eagerness to learn and in the cultural forms that have appeared in the "uncommitted cortex"¹ of his brain.

Teacher-Education Implications

Neurologists probe the location of consciousness. Teachers who are engaged in the business of securing the awareness of this consciousness know little of the discoveries. There is enough neuro-physical knowledge to share with teachers. It would seem appropriate and the responsibility of science to share this neuronal knowledge with teachers in teacher-education. Teachers need to understand the interactivity of facilitation and inhibition. What are 'inhibition' factors? What are conditions of 'facilitation'?

What is required are clearly established elements of learning:

1. What elements must be present?
2. What set of conditions must be present?
i.e., What are the essential presences?
What are the ideal conditions?

¹Penfield, 1975:97 referred to in this study, page 111.

The students of the origin of life are sure that certain chemical components were present when life began. What are students of the origin of intellect sure of? The existence of a living brain. Educators must be students of the elements of intellect. We must become more aware of the powerful acts of creation that we are engaging when we meet the enquiry of the students in our classroom arenas of learning.

It was once thought that mice grew in heaps of dirty clothes; sun bred crocodiles from mud, maggots were created in apples. Study of life origins has clarified past erroneous beliefs. How much like the past beliefs of life origin are some present practices of education? How does learning occur? There is too much speculation on this issue.

Learning—what happens? Scientific experiments as Miller and Orgel's have yielded such illuminating processes. So clear, so concise and once a law is established, so easy to reproduce. Will genetics of intellectual concept formation ever be tapped as biology has tapped the life formation?

Educational experiments dealing with the facility of a human model cannot take the ruthless steps one could with a pea plant, neither can results be held as constant. Interfering with consistency is always that elusive quality we are seeking—the human facility.

"I think you're just trying to make me forget," retorted a human organism. (Bronowski, 1973:423)

Neurology has important information for teachers.

Videotape and stimulated recall bring us closer to a learning event. These studies are bringing us closer to the learning process and we must continue to pursue methods which help to illuminate the complexity of ontogenetic development.

An audio-visual record is illuminating.

Do teachers observe the child enough? When can a teacher use a strategy to observe the child in the act of learning? During a Heathcote drama a teacher can learn to detach himself from the event and observe the flow of development revealed in the involvement, movement and speech of the role-takers.

Drama can be a diagnostic tool.

Penfield in neuroscience and Bronowski in biological science agree that to understand man in the present will be to throw light on the past and future and "on all other creatures" (Penfield, 1975:106).

Teachers must attempt to understand man.

Science will explain the learning process. Teachers should help in this experimental search. There is magic in the appearance of something yet like all magic it has an explanation in nature.

The appearance of the spectrum has a magical quality. The appearance of life form in the glass cauldron

must have had a magical quality. Yet chemical reaction could explain the phenomenon.

Nothing that evolves from teacher-child interaction is magical even though transformations in attitude and behaviour could seem to have a magical quality. The qualitative change in behaviour is a direct result of the biological stream meeting the cultural and resulting in a leap toward emergence. The change is the direct result of the conditions present. It is a transformation: an appearance of new concept formation through interaction, reproduction and cellular division.

Learning elements will be revealed in an understanding of the human brain.

Questions to be answered are these:

"Amino acids are the building blocks of life"

(Bronowski, 1973:314).

A. What are the building blocks of intellect: the levels of consciousness?

Experiments placed the ingredients of atmosphere under a ~~certain~~ process to form life.

(a) electric discharge processed amino acid
from the atmosphere

(b) freezing concentrated the material into the
crystalline structure.

B. What are the powerful forces in the learning process?

Summary. We have to close the distance between the push-button order and the human act. "We have to touch people" (Bronowski, 1973:374).

Does he mean sensitivity training? No. He refers to the need to be involved in a communication with ourselves and others in a common situation. We are all one in that we're human. We are stimulated by the same biological needs. Therefore we share something in common. We must recognise another's right to share our humanity and recognise our right to be human. The biological stream, the evolutionary development of the human race is one stream of development characteristic of all. The second stream, the cultural one, is our own personal development governing our awareness and determining our level of consciousness. The teacher and the children share a continuum of development (Figure 14). The magic is letting the streams flow together allowing the personal streams to meet. There should be no fear in this meeting. Teachers have a wonderful opportunity to observe and explain the learning process in this meeting. During the 'force to distantiate' the personality of the child is revealed. During the 'force to distantiate' the personality of the teacher is revealed.

Teacher training takes place in these meetings.

Learning takes place in these meetings.

Concluding Remarks

The source of the will's energy, the nature of the energy which activates the mind, can be negotiated somewhere else but the teacher must locate the will and set it in action. That is, the source of the energy is not of consequence to the teacher, it is the capturing of it that is of prime importance.

The will to speak;

The will to understand;

The will to "coexist and to recognise one another";¹

The will to act; is the force or quality a teacher must evoke in any effective method of teaching.

¹Merleau-Ponti, 1973:101.

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THE HUMAN ACT OF PROCESSING

The study itself cannot weld and form. Paper cutting, transparencies, models will never supply the vital energy source of the human presence in the present moment—the light source which displays the spectrum of colour present in the prism. The facility which "encourages dissonance reveals the miscellany and reduces the miscellany to order" (Heathcote, 1971:59) is within the person of the teacher. The teacher is the human presence using the spontaneity of the present to ignite the cognition which will develop the human facility of his pupils. The two life forces of teacher and pupil attention meet in a "coexistence of sensations" (Hodgeson, 1971:19)—a unique life-giving moment of awareness.

Spectrum

The light is the plan in action: the process; emotion in action. The will of the teacher reaches out to engage the will of the child. Teachers intervene with strategies to change the mundane to multi-faceted; to change the white light to refractions of seven hues.

The Plan: the surface structure, is a flat shape. The book of plans: the curriculum is words compiled, not flowing and creating but recorded and still.

The human act is the process which has the power

to discover the depth in the surface structure, to put the plan into action, and thus illuminate and build the entire form of the deep structure in a complex process of socio-cultural development.

An act of classroom learning involves many components: A plan, a belief, a subject, a teacher, children. IF these components unite in a process of learning, then development appears as a result of the force of those interacting components. The result is an achievement of the meeting. The particular combination of that meeting will never be recaptured, but successful teachers will continue to gain desired developments by combining the components in a new process, each meeting selected to suit the conditions and needs of each NOW.

The Spectrum Analogy

The deep structure: form, body of every structure, hidden from view within the surface skin.

The possibilities that reside in the situation: the potential that resides in classroom interaction to spark interest and thrust the child's cultural development forward.

The spark: the light: illuminates the structure in all its diversity: refracts to accommodate the variety in distance, curves wide and tight, revealing a "spectrum of attitudes": a miscellany of ideas reflecting a reaction of symbolic rendering.

Speech assumes inner process.

Expression, before knowledge.

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THE CLASSROOM ARENA OF CURRICULUM

The Living Structure

The classroom is a lifeless structure as a coral reef is lifeless without the living organism. When children enter the structure, then it is a living structure, colorful and moving as living coral. The structure chosen for the living organism determines its shape. Without a chosen structure it is without shape and in Aristotle's terms, "beautiful color, laid on confusedly" (page 120 in this study).

Whether structure is strategically planned or color is "laid on confusedly" is determined by the teacher's view of childhood and the teacher's knowledge of learning elements. Miller makes this clear in his work on Educational Theory: "The way we treat the child is largely a reflection of the way we conceptualise him" (1976:27).

The teacher/researcher whose thoughts and experiences are expressed in this study, is influenced by her particular view of childhood. This view was plotted on a model of educational positions by Miller during a survey of teacher perspectives (see Figure 15).

The decisions regarding teaching method and child needs are directly affected by the personal beliefs of the teacher. This fact must be recognised by educators so

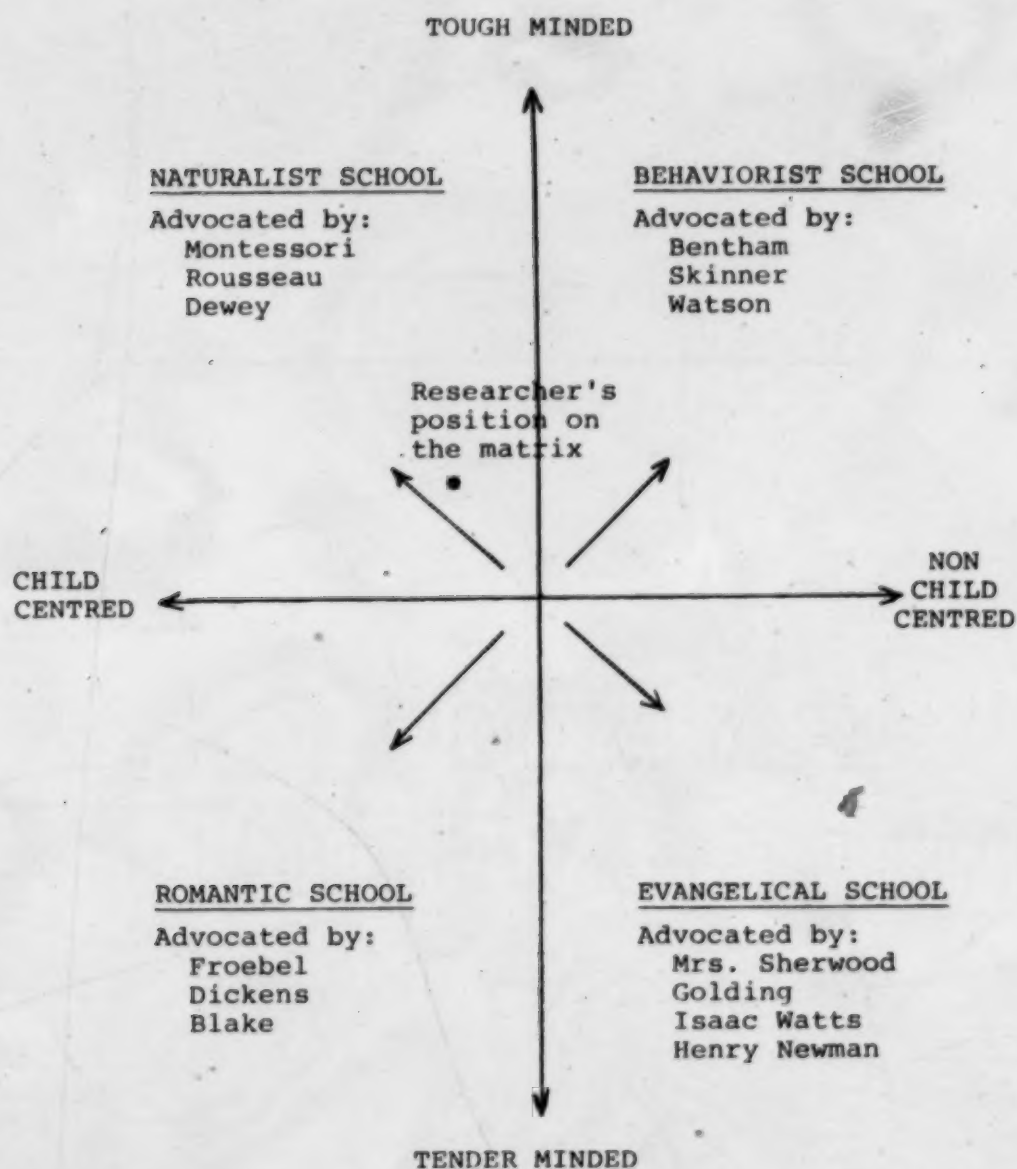


FIGURE 15. AN INTERPRETATION OF MILLER'S FOUR ARCHETYPAL EDUCATION POSITIONS

that realization and allowance be made for those views which are known to exist and are present in a variety of strengths, pervading every decision teachers make in the classroom.

The four archetypes are detailed in Miller's 1971 publication and in a more recent curriculum perspective (1976). Here he encourages educators to recognise the power of this pervading influence and make curriculum decisions with the knowledge that such views exist and can not be easily changed.

As seen on the grid, this educator's particular view corresponds with what Miller would call the Naturalist school of thought represented by the philosophies of Rousseau and Montessori. It is not surprising then for this study to find support in the work of the above theorists. It is the co-existence of corresponding beliefs and principles which find direct relationship and a common frame of reference. On the other hand it would not be surprising to find an immediate lack of support from representatives who hold the views of the opposing educational position. As Miller says: "In polarities you find the greatest criticisms" (1970).

This study would therefore expect to find support from the child-centred practitioners with most sympathy coming from the 'tough-minded' group who believe in control and structure but work toward the inner impulses of

of the child to give the impetus in the learning process.

In Montessori's description of the discovery of her own method and commitment there is a fitting relationship to the methods and commitment of this study and to the beliefs which have prompted its creation. Montessori's description¹ is significant:

This phenomenon gradually became common among the children . . . And each time that such a polarisation of attention took place, the child began to be completely transformed, to become calmer, more intelligent, and more expansive; recalling the phenomena of a higher consciousness.

It was as if in a saturated solution, a point of crystallization had formed, round which the whole chaotic and fluctuating mass united, producing a crystal of wonderful forms.

Montessori called this phenomenon: "the polarisation of attention." She specified that this phenomenon which may co-involve the entire consciousness, is only one of the constant elements of the phenomena of "internal formation."

In reflection we are reminded of the importance given in this study to 'Momentary arrests of attention' (page 3) and also that Montessori's term "internal formation" is a fitting title for the process of components attempted in this study (page 132).

At the time this polarisation takes place one could assume that conscious attention is alerting mind energy and

¹Montessori's reference is in Spontaneous Activity in Education (1965), pp. 67-74 "Experimental Science." All quotations are taken from this chapter.

directing the decision-making faculties which Penfield would say herald interpretive cortex activity and memory engram facility (page 111).

The 'higher consciousness' to which Montessori referred could be explained in the terms of this study as an indication of Vygotsky's cultural development theory: the clash of the meeting of cultural stream with developing evolutionary stream resulting in a leap toward a new level of mental development (page 92).

Montessori's 'internal formation' led to a 'psychical development' which was organized by the aid of external stimuli. The STRATEGY component in this study is the organization of an external stimuli which will envelope the child and correspond to his own organization, or to what Montessori called the child's "primitive impulse."

Montessori also commented on the form of liberty present in the psychical or internal development. This form is what is advocated by Rousseau and included in this study (page 19).

The teacher would be wise to capture the child's will and allow the child to feel free.

To conclude, it is fitting to draw attention to the "crystal of wonderful forms" analogy Montessori used to describe her impression of the child's transformation during the polarisation of attention and the ensuing 'internal formation.' It is reminiscent of the spectrum analogy chosen in this study to help disseminate the

convictions that this educator holds and emphasise the futility of surface-shape activity compared to the crystal of energy present in tapping the deep structure containing the hidden form of the child's developing power of dis-
tanti-
tiation.

The Child, a Human Organism

A child:

Needs space not only for movement of body
but development of intellect.

Must struggle to emerge.

Selects, matches, synthesises from a
spectrum of attitudes.

Can receive every kind of impression.¹

Need not accept his environment but can
change it.²

Has the power of anticipation, to look
forward, plan and prepare. (Reality of
inference.)²

Represents 'self-awareness': 'consciousness,'
not only of himself in the world but of man's
place in the movement of social evolution.³

During periods of conscious attention may
establish a recall pattern of neuronal
activity.³

Will become himself through others.⁴

¹"Plasticity of brain" (Rousseau, 1911).

²"Man is not locked into his environment"
(Bronowski, 1973).

³"Man must learn to control his own social
evolution."

"Conscious attention" (Penfield, 1975).

⁴"We become ourselves through others" (Vygotsky,
1966).

An Illustration

To recapture the initial classroom plan: 'Strategy.'

The form of the play was not previously constructed, it flowed and welded and burst like nature into life. The strategies were planned. They gained the initial attention which was the initial sensory input upon which the drama was 'launched.' The strategies also directed the focus toward the chosen area of intent. In this way vocabulary, time and place were established. A further strategy offered a role-taking opportunity and involved the whole class in a common situation. The teacher was one with the class. Decisions and ideas were initiated, interpreted, recognized and the initiated was confronted with his idea. The slow movement toward commitment was replaced by the speed of expressed emotions and the spectrum of student attitudes. The stages of 'Strategy' are the outcome of teacher-student involvement in a co-relative process.

JACK IN THE BOX

Children Devise Strategies

Eight grade two children plan a 'Strategy' process for a grade on class in October.

"Let's surprise the grade one-ers," said Stephen as the beginning grade filed out to the Library. This statement was followed by lots of enthusiasm from the

remaining group of readers. "We could dress up!" was one suggestion; "I've got a Jack-in-the-Box costume" said another. "It won't fit me but it'd fit Stephen."

"We'd have to make a box for him." Greater enthusiasm was expressed for these plans that developed in a twinkling between this little group of grade two who were eager to show they were superior to the beginners who shared their classroom.

"I can make hideous laughter noises like a witch" offered Jonathan who immediately sprang to his feet and tried to scare everyone. Everyone agreed that indeed Jonathan did make a good witch and Karl quickly offered, "My mom makes good witches' hats!" (The secretary made one however).

The teacher who was preparing to interest these children in a reading program sat back to speculate on this interruption and whether to take advantage of the hilarity which frequently accompanied this group's efforts to work.

Why not invest in the children's enthusiasm and turn this idea into a reading opportunity as well as give this little group a feeling of cohesion and importance.

"If the grade one are to be surprised by the Jack-in-the-Box they have to have some problem to solve when they get in here," challenges the teacher. "Well," deliberated Kennedy, who always solved the group's problems:

"Stephen could be locked in the box so he can't pop up!"

"How did he get locked in?" leads the teacher.

"What about the witch?" pipes up Jonathan who'd been quite absorbed by the folk tales of Sleeping Beauty and the Hans Christian Anderson account of the mermaid, "The witch could put a CURSE on the Jack-in-the-Box!" Everyone agreed on this curse and it gave new depth to the plan.

'Curse' was a great new word for the grade twos.

Hallowe'en was in sight and the idea of tricks and witches was also attractive.

"How can the grade ones help the Jack-in-the-Box?" posed the teacher, who'd been doing some planning herself. This led to speculations that lasted until the grade ones returned and so the strategy was secretly postponed until another opportunity.

In the meantime a mysteriously large box was decorated with interesting patterns and occupied a great deal of the two's spare time. One exciting day along came the suit which looked surprisingly like a clown's suit, and the group couldn't wait for an opportunity for Stephen to try it on.

Next planning day the atmosphere was more intense and roles were chosen for each of the twos. Jonathan insisted that his face should be green. The teacher talked about letting the grade ones imagine a few things. Timothy remembered a green light that was kept in the music

room. This prize was found and delivered and proved to be red. The red light was immediately plugged in and Jonathan stood on a chair in the corner of the room and looked fearful. "All lights out" ordered Tammy, who found it hard to speak and hardly ever did. To her order all lights went out and we all gazed at the sight. It was scary.

The holder of the light was the witch's helper. This was a very significant decision. Now there were fors and against.

"What would Richard be?" was a unanimous puzzle. Richard was a giant for this classroom as he's already spent several years there and was bored by proceedings and was usually found with his head in a book about rocks. "I'll be the forest helper, and help the ones," said Richard. He liked the idea of wearing a Robin Hood hat. Everyone screamed at Richard that he mustn't let the ones know the secret before the event.

The teacher finally won the group on the idea of making the words JACK IN THE BOX and cutting them out of the red felt which the cupboard produced. The successful reading of this caption when placed on the flannel-board would break the spell and free the Jack-in-the-Box who'd come springing out of the box and surprise everyone.

More time was spent in this preparation.

The final planning session was an exciting enactment

of the surprise ending. Richard who was to hold the letters of the magic word, found it a bit complex. It was decided that the ones would also find it too difficult to put all the letters in order so the four words were to be kept by four forest helpers. What would Tammy do? She'd stand by the light switch and on the magic words the lights would flick as if a terrible storm had descended upon us. Timothy had nothing to do. He looked left out, until he remembered that at the end of things (our Sesame Street songs especially), someone always crashed the cymbals together. He ran off for the cymbals. Kennedy the 'ever-ready' would meet the grade ones at the door next day after recess and tell them they were about to enter a 'Magic Forest.' It seemed the time would never come.

Analysis of the Proposed Strategy

The children entering the structure do not have to go far beyond assisting in the search for the words and attempting to read them. They are still grade ones in their own room but it has been transformed into a forest and inhabited by a witch, a curse, a large box and forest helpers. The children do have to accept this lie and for a time believe in it¹ but at this stage of the first months in school they are not asked to assume some other personality.

¹Heathcote's words page 39 of this study.

The teacher is now a facilitator. The one who can move from character to character and help move the event forward. She can help the ones adjust to the new situation by believing in it herself. The teacher is in this case a 'Director' and uses the strategies of intervention and observation, knowing when to say something and when to refrain from speech and action. This is the difficult task of the teacher in this event: retreat and allow the children to express ideas and viewpoints and make decisions that may be contrary to those of convention and contrary to a preconceived plan of the outcome.

What does not change is the teacher's aim in allowing this event to take place. Heathcote says not to change direction midstream. One begins with a plan for the journey and the strategies that will help that plan to eventuate. There is a clear aim in view which may not be apparent to the participants. What is not known by the teacher is the end of the journey. Views, decisions, emotions will be expressed and suggestions for action will be made. Always the teacher is operating on two planes: One to guide the action and facilitate the aim and one to observe the organic flow and know when to allow it expression and when to curb its direction. The journey is brought to a conclusion which satisfies the participants as well as the desired aim.

Observation of the Plan in Action

The ones come in quietly and look around the room. The red light takes their attention and there is a silence characteristic of this arrested attention. To get the action moving the teacher asks the forest helpers to tell us what has happened to our classroom. It doesn't take long for the witch to yell at us to stay away from the box and to threaten terrible things if we interfered with the curse in any way.

The dialogue was quite terrifying and the grade ones were awe-inspired but not too afraid to help the trapped Jack-in-the-Box. The witch made it very difficult for the forest helpers to whisper to the grade ones the secret way they could help and the words were only produced under the greatest of secrecy and difficulty as they were placed in haphazard fashion on the felt-board. The witch sent toads and parrots to spy on us and tell her of our secret plans. At the most tense moment cards were flipped down upon our conferring heads on which were pictured these spying creatures. The little ones assumed the roles of trees, rabbits and flowers in the forest in an attempt to escape the witch and help the victim. They shouted back to the witch and the noise level was high as some puzzled over the words. The words were now on the felt-board but in an order which made their decoding quite difficult. When no one expected it and when the teacher

was beginning to enjoy it there was a shout from the very youngest participant as she solved the problem and guessed the words! Lights flashed on and off; a loud cymbal crashed and a very flushed Jack-in-the-Box came leaping out of the paper cover of the box and frightened everyone into a moments silence and then into chatter, laughter and shouts of glee.

Our youngest member who until this moment thought she would never cope with school knew now that she could read. She had saved the Jack-in-the-Box and was the only one who could solve the problem magic word. Surprising progress was made by Laurel from this day. She was known by all to be a clever girl. Jonathan couldn't be contained all day; Stephen was made a fuss of; the box contained our story books for many months. The event was a stimulus for writing, drawing, speaking, and reflecting. Grade two were very important.

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The components of the living classroom are analysed in this spectrum. The synthesis is yours. As Chorus in Shakespeare's Epilogue says: "In your fair minds let this acceptance take" (Henry V).

In the living process that brings your mind to these words we unfold a drama. You bring the beauty of colour (ethos) to these bones of structure (plot). The "interlocking union of the parts and their final synthesis" (Butcher, 1951:342) is the complex act of your "higher mental processes" (Vygotsky, 1962:153) unfolding into the drama which is taking place between you and me.

A drama;

A living process;

An act of consciousness;

A force to distantiate.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Alberta. Department of Education. Elementary Language Arts Handbook. Edmonton: Department of Education, 1973.
- Alington, A. F. Drama and Education. Oxford: Basil Blackwell & Mott, 1961.
- Bain, Bruce. Unpublished lecture notes, Educational Psychology 578, University of Alberta, Winter 1976-1977.
- Bain, Bruce. Toward a Theory of Perception: Participation as a Function of Body Flexibility. The Journal of General Psychology, 89:157-296, 1973.
- Beauchamp, George A. Basic Components of a Curriculum Theory. Curriculum Theory Network, #10:16-22, Fall, 1972.
- Black, James. Unpublished lecture notes, English 330, University of Calgary, Summer 1970.
- Bronowski, J. The Ascent of Man. London: British Broadcasting Corporation, 1973.
- Brooks, Smith E., Kenneth Goodman and Robert Meredith. Language and Thinking in the Elementary School. Holt, Rinehart & Winston, 1970.
- Brown, Norman O. Love's Body. New York: Vintage Books, 1966.
- Bullock, Sir Alan et al. A Language for Life. London: Her Majesty's Stationery Office, 1975.
- Butcher, S. H. Aristotle's Theory of Poetry and Fine Art. New York: Dover Publications, 1951.
- Chukovsky, Kornei. From Two to Five. Berkeley: University of California Press, 1963.
- Danz, Louis. Dynamic Dissonance. Merle Armitage, 1952.
- Eliot, T. S. The Use of Poetry and the Use of Criticism. Glasgow: Faber and Faber, 1933.
- Gold, Joseph (ed.). In the Name of Language. Toronto: Macmillan of Canada, 1975.

- Heathcote, D. Drama and Education. In N. Dodd and W. Hickson, Drama and Theatre in Education. London: Heinemann, 1971.
- Heathcote, D. Drama as Education. In Nellie McCaslin (Ed.), Children and Drama. New York: David McKay, 1975.
- Hodgeson, J. Improvisation and Literature. In N. Dodd and W. Hickson, Drama and Theatre in Education. London: Heinemann, 1971.
- Jaques-Dalcroze, Emile. Eurhythmics Art and Education. New York: Benjamin Bloom, 1972.
- Jaques-Dalcroze, Emile. Rhythm, Music and Education. Surrey: The Dalcroze Society, 1921.
- Keller, Helen. The Story of My Life. New York: Dell, 1902.
- Luria, A. R. and F. I. Yudovich. Speech and the Development of Mental Processes in the Child. London: Staples Press, 1959.
- McFetridge, P. A. Unpublished lecture notes, Elementary Education 529, University of Alberta, Winter 1976.
- Merleau-Ponti, Maurice. Consciousness and the Acquisition of Language. Evanston, Ill.: Northwestern University Press, 1973.
- Miller, Peter J. Early Nineteen Century Concepts of Childhood. Journal of Education, #17, April 1971.
- Miller, Peter J. Freedom and Authority in Modern Educational Theory. Curriculum Theory Network, 5(4), 1976.
- Miller, Peter J. Unpublished lecture notes, Educational Foundations, University of Alberta, Winter 1970.
- Montessori, Maria. The Psychology of Mathematics. (An address given to the Cambridge Education Society, Trinity College, October 16, 1935). Communications (Association Montessori Internationale), No. 3, 1971, pp. 5-7.
- Montessori, Maria. Spontaneous Activity in Education. New York: Schocken Books Inc., 1965. (First printed in English in 1917.)

- Penfield, Wilder. The Mystery of the Mind. Princeton: Princeton University Press, 1975.
- Rousseau, Jean Jacques. Emile. Originally published 1762. London: J. M. Dent & Sons, 1911.
- Schachtel, Ernest G. Metamorphosis. New York: Basic Books, 1959.
- Schmidt, W. H. O. Child Development. New York: Harper & Row, 1973.
- Schmidt, W. H. O. Unpublished lecture notes, Educational Psychology 473, University of Alberta, Winter 1971.
- Spolin, Viola. Improvisation for the Theater. Chicago: Northwestern University Press, 1963.
- Sully, James. Studies of Childhood. London: Appleton, 1910.
- Taba, Hilda. Curriculum Development. Harcourt, Brace and World, 1962.
- Vygotsky, L. S. The Structure of the Higher Mental Functions. In A. Leontyev et al. (Eds.), Psychological Research in the U.S.S.R. Moscow: Progress Publications, 1966.
- Vygotsky, L. S. Thought and Language. Cambridge, Ill.: The M.I.T. Press, 1962.
- Warner, Sylvia A. Spearpoint. New York: Vintage Books, 1972.
- Warner, Sylvia A. Teacher. New York: Bantam Books, 1963.
- Werner, H. and B. Kaplan. Symbol Formation. New York: John Wiley & Sons, 1963.
- Young, Jean. Unpublished lecture notes, Elementary Education 549, University of Alberta, Winter 1976.